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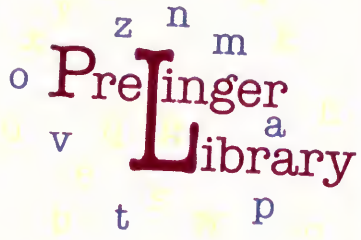
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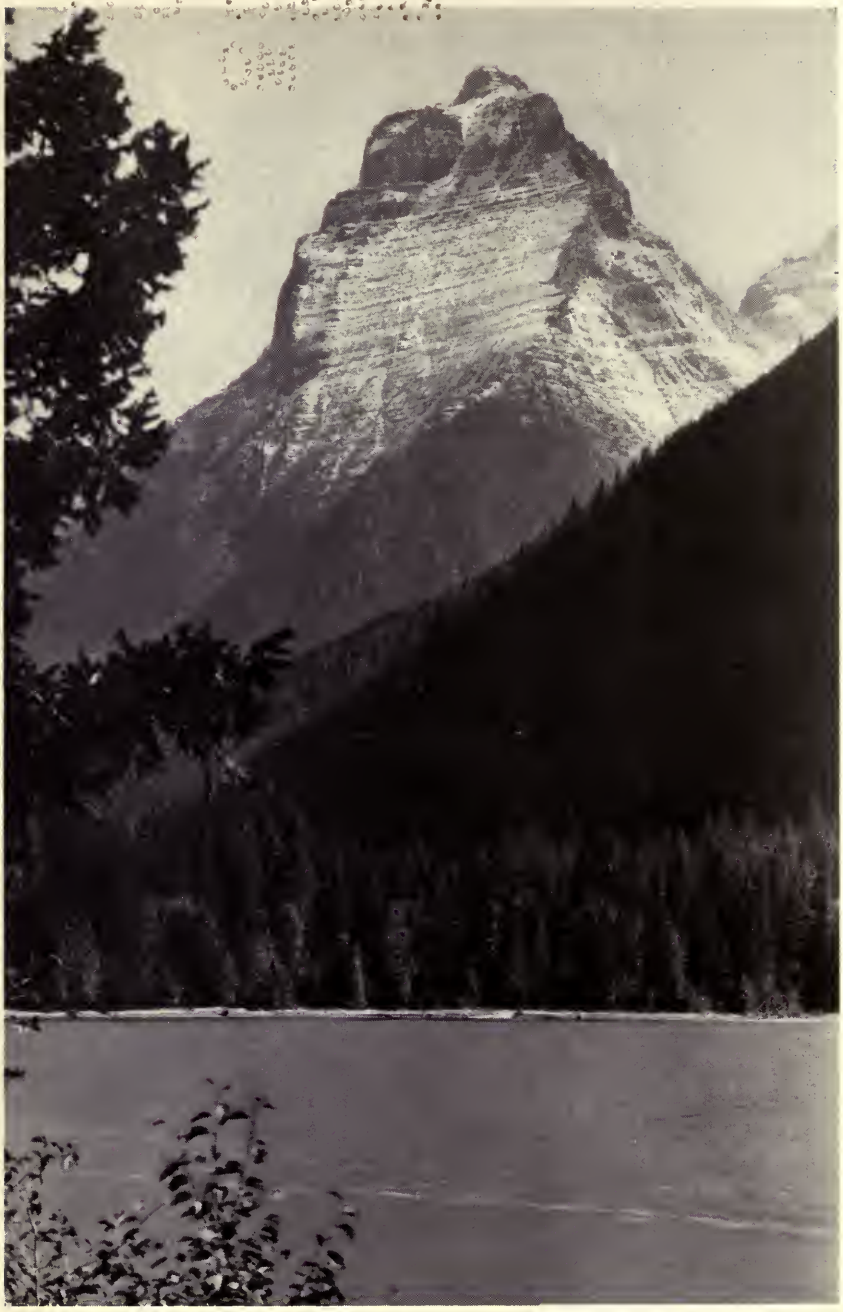
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Kinnerly Peak from Kintla Lake, Glacier National Park

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NATIONAL PARKS

PAPERS PRESENTED AT THE CONFERENCE ON NATIONAL PARKS, CALLED BY THE AMERICAN PLANNING AND CIVIC ASSOCIATION, HELD IN WASHINGTON, D. C., JANUARY 20-21, 1938

NATIONAL PARKS

Introduction

HORACE M. ALBRIGHT, President American Planning and Civic Association and Past Director, National Park Service

THE first National Park Conference was held in 1911 in Yellowstone National Park under the leadership of Secretary of the Interior Walter L. Fisher. Dr. J. Horace McFarland and Howard H. Hays, who are here today, attended that conference. The 1912 conference was in Yosemite Valley. Strange to say, that conference was devoted to the question of whether or not automobiles should be admitted to national parks and the outcome was that automobiles were admitted to Yosemite in a limited way. They tied them to logs with chains so that they would not run away and frighten the horses. It was at the 1915 conference in Berkeley, California, that Stephen T. Mather appeared as Assistant to Secretary of the Interior Franklin K. Lane. That was my first national park conference. The next meeting was in Washington after the passage of the bill to create the National Park Service. Dr. McFarland was present representing the American Civic Association which had been closely identified with the proposal and passage of the bill. We had our first national park art exhibit over at the National Museum. Conferences were held subsequently in Denver in 1919, in Yosemite in 1922, in Yellowstone in 1923, Mesa Verde in 1925 and in Washington in 1926. The conference went to San Francisco in 1928 and to Yellowstone again in 1929, the year that I became Director. In 1932 we met in Hot Springs and in 1934 in Washington.

In 1936, at the time of the Superintendents' Conference in Washington, the American Planning and Civic Association organized, in connection with it, a public conference of interested citizens. This year, again, we meet at the time of the conference of officials so that we may profit by the collaboration between the National Park Service and the Association.

I may say that the American Civic Association is a very old organization and that in the beginning it sponsored the National Park Service and through the years has been its strong supporter. It is fitting, therefore, that its successor, the American Planning and Civic Association, should be sponsoring these public conferences on national parks, that the American people may learn more about their valuable possessions and be always on the alert to protect their property from selfish commercial exploitation and to maintain in the national parks those standards of preservation and human use which were embodied in the Act creating Yellowstone National Park and later cast into more elaborate form by Secretary of the Interior Franklin K. Lane.

National Parks in National Thrift

ARNO B. CAMMERER, Director of the National Park Service

NO NATION can be thrifty unless it conserves its human and natural resources and uses them wisely. The urge to spend is opposed to the urge to save. Because of this well-known human trait we do not usually carry the savings fund and the spending fund in the same pocket, lest our fingers fail to differentiate between the coins. Likewise, the demand for immediate, personal gain is usually opposed to the general public weal and, for that reason, we do not place the conservation of our resources in the same hands that are engaged in exploiting them.

The founders of the national park system acted wisely when they had the first national park *set apart.* Not set apart to be uselessly hoarded as a miser hoards his idle gold, but set apart for definite, prescribed uses; to work for the Nation's welfare, just as properly invested capital works and accrues benefits for the investor.

The founders of the first national park went into considerable detail to specify clearly the types of use this capital, or natural resource, was to serve. The act of Congress, setting aside the first national park, the Yellowstone, stands as a Magna Charta for a new and thrifty form of land use. The substance of that conservation formula is that the area is "dedicated and set apart as a public park or pleasuring-ground for the benefit and enjoyment of the people" and that it should be preserved in its natural condition.

When we read that Act, we note how carefully the Congress circumscribed the capital asset with protective clauses so that the capital would not be dissipated for local or immediate gains. That capital, in this case, is the inspirational, or recreational, quality of the area. Everyone knows that we cannot chisel away from our capital and still expect the same return in interest. To hold otherwise is to be misled by a "have-your-cake-and-eat-it-too" philosophy. When the founders wrote those provisions, they were thinking specifically of such possible abuses as logging in the national park, the grazing of livestock, hunting and trapping of wild animals, mining, power and irrigation projects, private usurpation of scenic areas, and railroads.

Their Magna Charta, however, was not a bill of "don'ts." It was a positive prescription of appropriate and enduring uses. The park was to be used and enjoyed by all the people for all time and the only restriction was that they should so use it as to leave it unimpaired for the next generation. They were really asking so little, and the prescription is so simple, that many people fail to understand it even today and they refer to it as a "locking up" of valuable natural resources. Yet, more than fifteen million people last year visited our national parks and monuments—less than one per cent of our total land area.

Speaking now, for the moment, in terms of dollars and cents, it is significant that Julius Weinberger in his study of "Economic Aspects of Recreation," printed recently in the *Harvard Business Review*, makes the following statements about recreation and recreational travel:

"Foreign travel expenditures show clearly the combined effects of dollar devaluation and the depression. While domestic travel expenditures in 1935 had recovered to a total of $2,037,000,000, compared to $2,175,000,000 in 1929, the foreign account stood at only 48% of the 1929 figures. 'See America First' appears finally to be having its effect."

Mr. Weinberger goes on to say that "the American public in 1935 spent . . . one-third more for recreation . . . than the Federal Government did for recovery and relief, and more than the Federal Treasury collected from all tax sources. . . . Recreational expenditures exceeded the value of the products of the entire motor vehicle and rubber tire industries. Yet 1935 was a comparatively moderate year in terms of such expenditures, for in 1929 these were 80% higher."

In addition, that study reveals that recreational travel far exceeds all other recreational expenditures.

While I do not wish to burden you with figures, these statements are sufficient to indicate that our recreational resources are of such importance as to require prudent husbandry in our national economy. The husbanding of those resources involves the question as to just what part the National Park System should be given in that program. As national parks are the lodestones of travel in this country, their place in the economic field is an outstanding one. The increasing volume in motor travel alone adds to the commercial income of each region traversed.

There has been some apprehension in recent years as to what lands should be included in the National Park System and a great deal of misapprehension concerning the ultimate objectives of those who support the park movement. I should like to clarify those questions, at least in so far as it is within my purview to speak. I appreciate, and I am sure that the members of my organization appreciate, the national value of good forestry and good agricultural practices and we should like to see those practices extended and continually improved. We do not consider that parks are a substitute for *either*, or that they are a substitute for parks. We do not wish to substitute parks for lands that are primarily valuable for grazing, mining, trapping or power and irrigation projects and we do not wish to see these pursuits conducted in parks. Nor do we urge park use as the only form of conservation, for there are many. But, *those areas and objects that are primarily valuable for the inspiration of the Nation should be included in the national park and monument system.* The park type of use was devised to provide for the *maximum* use of *those* resources. No other category of land use can provide that maximum use. It has a very definite and important place in the thrift of a nation and no thrifty nation can afford to overlook it. We are

attempting to appraise and secure for public inspiration and benefit:

All those areas that are nationally of more value for recreation and inspiration than for any other use;
Outstanding stretches of the ocean beaches;
Nationally important prehistoric and historic sites, objects, and buildings;
The finest representative examples of native plant and animal associations;
The most instructive geological phenomena; and
A system of nationally important scenic and historic parkways.

I see no grounds for apprehension about such a program nor can I understand why certain organizations should oppose it. It does not duplicate or threaten any other legitimate form of land use and it does not infringe upon the integrity of any other field of government. I am inclined to believe that the chief difficulty lies in the failure to realize that the national park and monument system is not a luxury but is a legitimate and thrifty investment in natural and human resources and that we have as yet failed to comprehend the ultimate possibilities of that type of investment.

I have stated on other occasions that the park concept provides a new form of land use, humanly satisfying, economically justifiable, and with far-reaching social implications. Inherent in it is a new recognition of human values and a more intelligent method of commercial exploitation. As such, it is a progressive step in land utilization and must take its place along with the other great land-use techniques such as forestry, agriculture, and mining. While it has been given considerable impetus in this country, it is still in its infancy. When it has been accorded proper recognition, the National Park System will comprise fewer lands than those devoted to forestry and agriculture but it will include those areas and structures which cannot be adequately preserved and properly used under any other category or land management.

When we speak of use, it does not necessarily mean development. One of the most important objectives of the park system is the preservation of large tracts of roadless wilderness, as a character and stamina building resource for all time.

We are not dealing with a luxury; we are dealing with national thrift. If we are to be, and remain, a thrifty nation we must classify our lands and resources according to their greatest possible contribution to human welfare, which means to classify them according to their best uses. In such classification, we must provide for the conservation and use of those resources that are primarily of inspirational character. Some lands are best suited for agriculture, others for mining, grazing, forestry, wildlife refuges, and so on. But the nationally important inspirational, or recreational, resources cannot be provided for under any of these; they will be properly conserved and will render their maximum use only when given park status.

A thrifty nation will not overlook the conservation of such resources.

The Defenders of the National Parks

J. HORACE McFARLAND, Past President American Civic Association and Chairman of National Parks, American Planning and Civic Association, Harrisburg, Pa.

OUR national park relationship began when the American Civic Association was organized in 1904 in Saint Louis. We then discovered that there was not one whole desk in Washington given over to the affairs of the national parks, nor the whole time of any one man. That may seem curious to you, but, as a matter of fact, there was then no Federal park bureau. The administration of the existing national parks created by Congress was scattered among several Departments.

We tried to secure legislation in successive Congresses and sometimes we managed to have a bill passed by one House or the other, but never by both, until Secretary Lane came into office with the Wilson administration. We presented our case to him. His response was instant. He said, "Mr. McFarland, if what you say is true, the conditions are about the same in the National Parks as they would be with the Baltimore and Ohio Railroad if it operated its trains between Baltimore and Washington without a train dispatcher."

Secretary Lane moved rapidly and effectively. The result was the Act of Congress of August 25, 1916, which established the present National Park Service. Mr. Lane brought Mr. Mather into the park work. Mr. Mather was the kind of man who, when we wanted a national park established, went down into his own pocket to provide the financial deficiencies. He could enthuse people. He was a man of force and fine spirit. He brought Mr. Albright in, and if I mistake not, Mr. Cammerer. He organized the National Park Service. He did it with the sympathetic assistance and backing of Mr. Lane. That was the beginning of the organized National Park Service. Now what a contrast!

The people of the country have discovered what these parks are. They have discovered places and facilities that are not available anywhere else on earth. If you had heard, as I have heard, these notable papers, not written by cranks like myself, but by the men on the firing line who are and were giving their fine service today and yesterday, you would realize that the national parks are not only sold to the people of the United States who visit them but that they are sold to these grand men who have dedicated themselves to administer the parks for your benefit.

We should not forget that the modern conservation impulse grew out of the White House Conservation Conference of Governors which was called by President Theodore Roosevelt in 1908. At that conference there were gathered forty-one Governors, the President's Cabinet, some of the members of the Supreme Court and several hundred legislators. It was a very notable and distinguished audience that met in the East Room of the White House. The President opened the Conference with

an inspiring address which left every one of the Governors ready to follow him. I believe that great conference was the beginning of the salvation of America.

For we were destroying America just as fast as shovel and pick and saw could do it. We were doing it with self-complacence and taking pride in it. That conference brought to our knowledge that we could not have our cake and eat it and that if we wanted any scenery fit to look at we would have to do something about it.

Out of the work of the last thirty years we must realize that we have a national park system which is the result of devoted interest on the part of those who believe in national parks. But devoted service did not end with the creation of the parks. They needed defending after they were created. The national parks have not had an easy time of it. One of the jobs which our Association carried for years was that of guardian of national parks when they were under attack through bills introduced into Congress to appropriate the lands and waters dedicated to the people for the selfish uses of would-be exploiters. Yellowstone Lake has always been a target. We have saved Yellowstone Lake many times and it seems now that we shall have an opportunity to save it again from current predators. Through our literature, through our personal appearances before Congressional committees, through private interviews with administrative officials and members of Congress we have fought the good fight over and over again. In all these years we have lost only two great battles—one was to save the Yosemite from Hetch Hetchy reservoir and the other was to save Rocky Mountain National Park from a tunnel underneath it and power structures along its most beautiful approach.

After all these years of close collaboration, I want to say that I am proud of the men and women who compose the National Park Service. They live their work and are devoted to it. The Service has an able Director and I am glad to bear testimony to the fact that if there ever was a solid and firm friend of the national parks it is the present Secretary of the Interior. At a dinner given in his honor soon after he took office he gave an unforgetable pledge of service to the parks and we knew then that we had a friend.

I believe that the national parks are a great factor in patriotism. The man or woman who visits the national parks and who sees how they have been kept inviolate is a better citizen. That is why I have no fear about what is to happen in America. That kind of people cannot "go" Bolshevist. That kind of people cannot be turned over to an authoritarian or totalitarian or any other "arian" kind of government. We people have learned to enjoy our national parks. The money we spend on them is a trifle compared with the good we gain from them. We have a grand and glorious heritage in the national parks, which we may enjoy but which we must not destroy.

Conservation *vs.* Exploitation

FREDERIC A. DELANO, Chairman of the Board of Directors, American Planning and Civic Association, and Vice Chairman, National Resources Committee

ONE of the great dramatists of the world, a man who lived nearly three hundred years ago, was accused of plagiarism, and instead of denying his self-impeachment, he said, "Why, yes. Whenever I get an idea I use it." Now there is nothing new about plagiarism. Shakespeare has been accused of plagiarism. There are some people living who believe that another man wrote his stuff. I think it quite likely that Shakespeare got some ideas from Francis Bacon, but he put them into better form than Francis Bacon. Proof of this is that Shakespeare lives and Francis Bacon is dead. I do not need to apologize, therefore, for plagiarizing the speeches and writings of my many associates in the national park work.

This is not the first of the meetings on national parks that I have attended. They seem to me just as good as ever. I do not get stale on them. They make me want to pay a tribute to the men in the Government service. You know a railroad is a very common carrier and I have been a common carrier for a good many years. Now in the Government service I find men in the heads of bureaus and junior officers in the bureaus that so far excel the type of men that I used to find in corporate management that I want to pay a tribute to them. I hear lots of men abusing bureaucracy, but if bureaucracy means, as I think it means, devoted, unselfish service, I am for it.

David Cushman Coyle, who is one of my friends here, whom I discovered in this maelstrom in Washington about five years ago, was an engineer who used to design the steel frames of buildings that architects drew pictures of. You never saw his name on the Empire State Building or any other big building in New York; you saw the architect's name. But if David Cushman Coyle or some other engineer had not drawn the designs for the steel frame, that building would not stand. So I have a great respect for him. When I first knew David Cushman Coyle it was when our economic troubles were at their height. I saw a little booklet that he had written and I was so impressed with the wisdom of that book that I, to use a vulgar expression, "contacted" him. I said, "I wish some time when you are in Washington you could come and see me." Since then he has written a number of small books on various economic subjects. I have read them all. One of them that I read was on a very dry subject, but every three pages he said, "This is a big country." Well, that did not faze me much the first time. I knew it was a big country. But three or four pages on I read it again. And so on right until the end. It began to sink into my cerebellum that that was a rather wise statement to make. The great trouble with us is that we constantly forget that this is a big country and that we have a great

many big problems. That is one of somebody else's ideas that I picked up, and I pass it along to you.

I once heard a definition of a good citizen. It is a citizen who knows something about everything and everything about something. Now I cannot claim to know everything about something—I wish I did—but I do get a lot of enjoyment in knowing something about everything. I do it by listening to other people's wisdom. Therefore, I commend these meetings which you have had. During the last two days we have been devoting our attention to conservation. I agree with the previous speaker that it is very easy to say conversation. Just the transposition of two letters makes a lot of difference. We have been talking about conservation and we have all learned a good deal about it, but it was not all conversation, it was really good stuff. I differentiate between those two words. Conversation means quantity production. Conservation means quality production.

I want to call your attention to some of the important facts about conservation. The natural resources of our country include many things. Beauty is an important feature of our conservation. Another is the recreation of our people by giving the opportunity to enjoy the wonderful adventure of outdoor life. And there is something that one of the experts pointed out that I never thought of before: Recreation is the benefit you get from doing something that comes after you have done that thing. It is something which explains the after-effects of what you enjoy.

I think that the real feature of conservation, the most important and fundamental to us, is that it is the one thing that stands between us and exploitation.

In closing, I am going to cite two cases of that, and you can think of many others that are equally serious. There are two States that I have in mind in our country and I will not mention their names—the comparison is sometimes odious—but here is the situation. One of them is a State with immense natural resources of the type people talk about—iron ore, coal, and many other similar resources. There is another State that was settled by the same type of people about the same time that had none of those resources, perhaps building stone or something like that but nothing else. When I look at those two States I find that the State that had all those mineral resources has today many exhausted mines. Many pecks of slate have been taken out of the coal mines, oil wells exhausted. Many fortunes have been made but the people who have the fortunes do not live there. They live somewhere else. Now in the other State that I speak of, there were forests and grass lands when our forefathers came to this country. They had very few natural resources in the way we think of them, but today that State has just as much as it had in the beginning. It is not a waste land at all. It is a happy homeland for many people.

The Olympic National Park

HONORABLE HAROLD L. ICKES, Secretary of the Interior

EDITOR'S NOTE.—As an important pronouncement on national-park policy and an authoritative indication of future plans for the Olympic National Park, created by Act of Congress, approved June 29, 1938, we are glad to present here the address delivered by Secretary Ickes at the Seattle dinner of the Northwest Conservation League on August 26, 1938.

IT IS a pleasant privilege to speak tonight before this gathering of men and women who have met to honor Representative Monrad C. Wallgren, sponsor, in the national House of Representatives, of the bill which created the Olympic National Park. . . .

I bring to you this evening a congratulatory greeting from President Roosevelt, and, in doing so, I wish to testify anew to his personal interest and activity which helped to bring this new park into being. Beset as the President was in the closing days of Congress by grave problems of statesmanship, he found time to help outline the final form of the Olympic park bill, and to see to it that the measure was not lost in the stampede toward adjournment.

I can say without the slightest hesitation that the Olympic National Park, when rounded out by proclamation under the power given to the President to add additional territory, will take its place with the greatest parks in our national system. It will be a worthy rival of your famous Mt. Rainier National Park. It will be inferior to none, and at the same time it will be different from all others.

A region of tumbled mountains, of far-spreading glaciers, of trees of unimaginable size—the wet forest tropics of North America—lies here on the Olympic peninsula, near the great city of Seattle, without acclaim, without recognition, almost unknown. Bring it into the National Park System, place the signet of government recognition upon it, and it will speedily spring forward to its rightful place. Visitors will come to it from all over the world.

In view of this it is timely to reflect that fame has its drawbacks as well as its compensations. A national park, praised by everybody, thronged to by the great traveling public, needs the same protection from its too enthusiastic admirers that a man needs when fame descends upon him. Society offers little, if any, protection to the man seeking to escape from those who adulate today only to forget tomorrow. It is simpler and easier to protect a national park, provided the right kind of a start is made. In the case of a wilderness area like the Olympic National Park, the solution can be stated in four words. Keep it a wilderness.

When a national park is established, the insistent demand is to build roads everywhere, to build broad easy trails, to build air fields, to make it possible for everybody to go everywhere—*without effort.*

These last two words are what cause the trouble. It is characteristic

of the American people that they want everything to be attainable *without effort.* Too many of us want a predigested breakfast food for our stomachs and a previewed national park for our eyes. Nine people out of ten, visiting our national parks, stay within half a mile of the motor roads and the hotels. Some of these people appreciate and love the parks, but are physically handicapped. For these we should show the greatest possible consideration. Others feel that they are roughing it if they twist their necks in a sightseeing bus, or expose their adenoids to the crisp air while gazing through field glasses at some distant scene. And these are the vast majority. Only a few days ago I was told of a man and his wife who stopped at a park entrance, bought a sticker which they placed on their windshield and then proceeded happily and triumphantly on their way. They had "seen" another national park. . . .

I am in favor of opening a liberal and representative section of every national park to those who, because of physical limitations, are confined to motor roads. I am even willing to make this same concession to those who cling to motor roads as a matter of choice. But let us preserve a still larger representative area in its primitive condition, for all time, by excluding roads. Limit the roads. Make the trails safe but not too easy, and you will preserve the beauty of the parks for untold generations. Yield to the thoughtless demand for easy travel, and in time the few wilderness areas that are left to us will be nothing but the back yards of filling stations.

This is a fitting occasion to speak of the general policies of our Government in expanding and administering its national park system.

There have been two stages in the creation of national parks. During the first stage, national parks were established on lands already owned by the Government on which there were striking natural phenomena—mountains, glaciers, waterfalls, lakes, geysers, hot springs, etc. Such lands were created into national parks without much opposition, provided the lands had no commercial value. The boundary lines were drawn so as to exclude all commercial timber, all mineral deposits, all lands suitable for grazing. . . .

In this second stage of creating a national park system, we have come to realize that even though a land area may have commercial value, it may have an even greater value for national park purposes. We have discovered that, in special instances, the commercial value of a given area may be enhanced by staying the woodman's ax. There are instances where the preserving of a notable forest, especially if the forest is only one feature of an outstanding scenic region, not only enhances the commercial value of the region but makes this value a continuing one.

An example of this is the Great Smoky Mountains National Park in the southern Appalachians, where, through the cordial and close co-

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operation of the States of North Carolina and Tennessee and the Government of the United States, the greatest of our eastern national parks has been set up. This park was created to preserve for all time the last of the virgin hardwood forests of the East. Here forests, of great commercial value, were acquired by the States of North Carolina and Tennessee and presented as a gift to the Nation. The United States Government has also made a considerable investment in this park, as have two or three interested citizens, notably John D. Rockefeller, Jr. The Great Smoky Mountains National Park was opposed by local lumber interests, but was overwhelmingly supported by the people who saw the virgin forests of the East disappearing before the saw and ax. Today this park has the favor of practically all of those who at first opposed its creation.

That is the universal history of national parks. Those who fight them become their ardent supporters and defenders after they are created.

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This new Olympic National Park in the State of Washington has the characteristics of both of the two general types of national parks. It has the mountains and glaciers of the first type, and it has commercially valuable forests which place it in the second type. Because of its valuable forests, this park was established over the vigorous opposition of the lumber interests, which would have been quite willing to see a small park restricted to the treeless snowfields of the high mountains.

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As I have traveled, mile after mile, around the Olympic peninsula, and seen mile after mile of gigantic stumps, the blackened logs of slash firings, and the scattered dead shags that tower skywards, gaunt specters of once noble trees, I have marveled that any man or woman in the State of Washington could oppose the proposal of Congress to place in trust for all the people for all time this outstanding area as a national park, thus preserving a fragment of this wonderful primeval forest from otherwise certain destruction. Yet opposition was natural.

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Wherever a commercial interest conflicts, or even merely seems to conflict, with a non-commercial public purpose, you will find men fighting for commercialization regardless of every other consideration. Throughout the United States, the record of private timber exploitation has been one of ruthless destruction, not by bad citizens, but by men caught in a system they could not control; by men so engrossed in the struggle for survival and supremacy that they have not stopped to count the cost of wasting a national heritage.

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All thoughtful men recognize that, when natural resources are wasted, there must be a reordering of economic life or disaster will ensue. In fact, many sections of our land have not escaped disaster more or less complete. An almost demoniac onslaught upon our forests, beginning at the Atlantic seaboard and spreading over westward until this greatest stand of all along the Pacific Coast has been reached, has been followed by destructive forest fires, the inevitable result of which

has been to burn out the soil while consuming the trees, to dry the source streams of our rivers and to make uninhabitable for our wildlife a once teeming land. Following the woodman with his indiscriminate ax, his trail lighted by raging forest fires, there came in their turn destructive floods that have cost in the aggregate thousands of human lives, as well as an incalculable property loss; water erosion of rich and irreplaceable top soil and its sinister twin, wind erosion. . . .

By the cutting of the trees a forest was lost; by the cutting of a forest a land was lost—all for the lack of foresight and self-restraint on the part of our rugged individualists; all for a failure on the part of our Government to insist upon sound conservation policies before conservation assumed the characteristics of a rummage sale.

The prevention of further demolition of our timber resources, with its resulting disorganization of our economic and social life, depends upon the new system of forest management which was forced upon the Federal Government some years ago. This government undertaking is in charge of the Department of Agriculture and with it I am in hearty accord. National park policies touch this question of forest management at various points, but chiefly in this particular. It is the function of the national parks to preserve specimens of the primeval forest, so that coming generations may see portions of this land as it was when the Pilgrim Fathers landed at Plymouth, when Daniel Boone pushed westward across the Appalachians, and when Lewis and Clark made their way through the towering conifers of the Pacific Coast.

We have created national parks, or added to them, to protect the giant sequoias and the sugar pines of California, and the hardwoods of the East. Now, in the State of Washington, we are protecting a fragment of the Pacific Coast rain forest with its magnificent Douglas fir, Sitka spruce, western hemlock, and giant cedar.

On the Olympic peninsula cedar trees are standing that are forty-five feet in circumference, trees from which Indian women stripped inner bark for clothing a hundred years before Columbus discovered America. In this new park there will be Douglas fir forty feet in circumference and a thousand years old.

The reservation of this area is not exclusive of or inconsistent with the right of the lumber industry to a proper and legitimate exploitation of the lumber resources of this area. The manufacture of lumber is necessary to our prosperity and well being as a nation. There is room on this peninsula for forests for both the people and the sawmill. Assuming that the self-interest of the lumbermen is an intelligent one, we have a right to look forward to a willingness on their part to coöperate with the Government to the end that this wonderful section of our country may be put to the wisest and best use for all concerned.

Under any system of timber exploitation, whether that of profligate destruction by unregulated private operation or that of the sustained

yield method of scientific forestry, all of these great trees were doomed before the establishment of this national park. It is the function of the national park to save a part of the primeval forest for us and our children and our children's children that we may gaze upon it in awe, and wonder at the majesty of Nature's handiwork.

One would think that it might be taken for granted that every Government agency having to do with the conservation of our natural resources, particularly as it relates to our forests, would gladly coöperate in any effort to preserve sections of our primeval forests for future generations. It is not to be denied that this can be done only through the setting up of national monuments and national parks. And yet, as you in the State of Washington know, this outstanding Olympic National Park was opposed . . . by local men in the Government service whose lives are supposed to be dedicated to the principle of the highest possible use of our forests. . . .

Nor has the National Park Service been immune to overt attack and sinister propaganda from similar groups when other outstanding areas little, if any, inferior to that, the acquisition of which we are here tonight to celebrate, have been proposed for national park purposes. The Department of the Interior for years has gladly coöperated with the Forest Service. Without demur we have handed over millions of acres of the public domain desired by that Service. Only in rare instances, and then for insignificant tracts as to size when compared with the forest lands as a whole, have we, on behalf of the public, asked for the rededication of a negligible number of outstanding areas for creation into national parks. Both services are arms of the Federal Government that, in theory at least, are devoted to the same ideals respecting our natural resources.

The commercialism or selfishness that stands against such an undertaking by the people, through their government, is doomed to defeat. It met defeat in the Congress of the United States when this Olympic National Park was established, and the President was given power to determine its final boundaries. This commercialism and selfishness met a greater defeat, however, in the State of Washington itself, where a public opinion that would not be denied rose up behind Congressman Wallgren and your Representatives in both branches of Congress who favored this enterprise, and demanded the creation of a real park. I want to say that the fine thing about Congressman Wallgren's attitude is that he stood for this park before, not after, public sentiment rallied to it so overwhelmingly. Congressman Wallgren was statesman enough to look ahead and courageous enough to lead when leadership was needed. Fortunately there were here in the State of Washington, as is videnced by this fine occasion, forward-looking and enterprising citizens who wanted to be led and whom it was an inspiration to lead.

The greatest function of national parks is to preserve what civilization, lacking them, would destroy. The increasing destructiveness of

civilization must be counter-balanced by a steady growth in our National Park System. A part of this function of conservation through the park system, and this is increasingly important, is the preservation of wildlife. As most people know, hunting is forbidden in all National parks. Fishing is permitted and encouraged.

There are many sound reasons for the policy of our Government in closing all national park lands to hunting. First, the forces of civilized society are set so heavily against the survival of the larger mammals that they can be preserved only in large sanctuaries. For these the large national parks are ideal. In the second place, living wild animals form one of the chief attractions of our national parks. People from all over the United States go to Yellowstone to see bears and bison, as they will come to the Olympic National Park to see the Roosevelt elk. Wild animals and good fishing are powerful magnets to draw the public. In the third place, hunting in national parks would be dangerous to all park visitors. Yet even the hunter benefits from this policy of wildlife protection, for when a national park is maintained as a wildlife sanctuary, surplus game spreads into nearby regions, thus providing a constant supply for the sportsman. For the sound reasons enumerated, national parks are permanently closed to hunting.

Fishing is in a different category. Fishing brings enjoyment to millions, endangers nobody with stray bullets, and can be maintained indefinitely. The United States Government encourages fishing in the national parks. Whenever a State passes a law ceding complete jurisdiction over park lands to the United States, so that fishing licenses are not required, the Federal Government stands ready to assume the full cost of keeping the lakes and streams of such parks stocked with fish. One of the effects of this policy, of course, is to make the parks far more attractive to visitors from outside the State. This is one of the legitimate commercial advantages which a State may derive from the national park system. . . .

Let me point out that there is a broad community of interests between a national park and the region surrounding it. When as many as 600,000 people visit one national park in a year, how much money do you suppose they leave in the surrounding country? And this money spent by tourists is a steady source of income. It may even be an increasing source of income.

In the case of the Olympic National Park, practically the entire financial return will be to those who live in the surrounding communities. Since this is to be a wilderness park, the Department of the Interior will neither build nor approve the building of hotels on public lands.

It is our intention to build overnight trail shelters for hikers and horseback parties, but those who want all the comforts of home, including facilities for reading while taking a bath, will have to look for them in the communities that encircle this park, at the base of the mountains.

National Parks and National Forests—Different Forms of Land Use

HONORABLE M. L. WILSON, Under Secretary of Agriculture

THE term "land use" and the set of ideas which it connotes are largely the creation of the land economists and the planners. These ideas grow out of the assumption that land is not a single economic entity but that there are many kinds of land and many different ways in which the earth's surface may be used.

Society is trying to establish the proper relationship between human resources and human needs and the natural resources in the land. Both the social and natural sciences have developed sufficiently to provide a solid basis for conscious direction in land-use planning. Theoretically, such planning presupposes a sort of two-column inventory, with land in one column described as to character, class, grade, and possible uses, and people in the other column with their several biological, economic and cultural needs. Now the planners and the technical experts move these two columns back and forth like a slide rule in order to get the highest standard of living for the people from the best use of the land.

This is a new procedure. It was not in the pattern of ideas that characterized pioneer America. It is one of the factors in a transition to a new pattern of ideas. In a democracy the procedure will go as fast as education produces attitudes of mind on the part of the public which will sanction the programs of action which grow out of land-use planning. This mode of thinking gives one kind of systematic approach, in a way a functional approach, to a lot of current problems.

Now I have some definite ideas about land use in relation to the national parks and the national forests. Before I tell you what these ideas are, I want to tell you where I got them.

Man is always perplexed as to where his ideas come from. Do they come from the intellect or do they come from experience? On this matter my ideas come from the intellect with a small "i" and from experience with a capital "E."

This is the situation. For twenty-five years my home was so located that the sun rose and set in a national forest. The water which I drank and which I used in my household came from a national forest. The water which irrigated my lawn and garden came from a watershed in a national forest. The rough lumber used in the building of my house and garage came from the same forest; so did the cord wood for my fireplace. A part of the meat that I ate came from grass of the same forest. No small part of my psychic satisfaction came from Middle Creek, Cottonwood Creek, and Sourdough, from Mount Blackmore, Hyalite, Ross's Peak and Bridger range.

But this is not all of my experience. It is approximately 60 miles from my front door to the northwest corner of Yellowstone National Park. I shall never forget my first trip to Yellowstone. It seems like a long time ago but certain impressions are as distinct now as though the trip had been made yesterday. I recall the Wiley Way—the Stage Coach, and the fat women who worried about the bear or feared that the team would run away. Mammoth Hot Springs were up to expectations, the "Sputterer" sputtered at Norris Basin, the pools were beautiful, and Old Faithful proved faithful. My first view of the canyon was from Artists' Point. There are no words to describe the deep psychological "something" that stirred the bottom of my soul. Only a very, very few times in my life have I experienced that "something" which I had when I first saw Yellowstone Canyon. I think I "got" religion then and there. But I'll tell you more about that later.

Once the park management did something that made me terribly sore. Early in 1915 it was announced that when the park opened on June 15 automobiles, provided they had good brakes, would be admitted and that the horse stages would be replaced by automobile stages. My town participated in this "march of progress" by sending Bud Story, and Chester Davis, then editor of the weekly newspaper, now a member of the Federal Reserve Board, to demonstrate that the entire round trip from Mammoth back to Mammoth could be made in one day. Theirs was the first automobile to scale Mt. Washburn. When I read about it in the *Courier* I was not elated by the account of this trip. I was depressed. While in this state of mind I met Frank Slaughter on the street. For 20 years Frank had been cook and general all-round man for Howard Eaton and the Wiley Way. Now he was the town marshall. Said Frank: "The Park has gone to Hell! This idea of rushing people through in autos! No one can see the park in less than eight days. The autos will scare all the animals back to the brush, including the bear, and they will never come back. Just think of the accidents they will have! And anyway, we want to keep Yellowstone Park wild, just as it was in nature. The first think you know these autos will bring in so many people that you can't see anything."

I felt just like Frank Slaughter.

But about that time or a little later the Park had a Superintendent who did such a wonderful job of shifting from the old Park to the new Park that I soon got over my soreness. That Superintendent was Horace Albright.

I doubt if you would believe me if I were to give you my guess as to the number of times my family and I have visited Yellowstone. I checked over the other day and found that I have been in 17 National Parks. So you see these definite ideas of mine grow out of experience with a capital "E."

Now that I have told you where my ideas come from, what are the

ideas? First of all, at least once in his life every normal person in the United States should commune with nature in one of nature's great cathedrals. Thereafter he should repeat the visit as often as possible. He should have the opportunity to "get" religion as I have. When you divide one hundred thirty million people by the number of really grand parks, you get a problem that the planners will have to solve. The areas in these parks are dedicated to one and to only one use—recreation in the sense of being re-created, to culture, and to, well, I call it religious expression of nature. Economic considerations are wholly incidental.

I do not think that the principal function of the national parks is recreation in the usual sense. To me recreation means easing up, getting filled up with mountain and forest air, having a good time. But when I see Yellowstone, Grand Canyon, Crater Lake, Yosemite and Mesa Verde, I do not exactly have a good time. I have a great psychological experience.

I think Stephen Mather, first Director of the Park Service, had this in mind when he said: "The National Park System is made up of areas of incomparable scenic grandeur. . . . Each area selected must represent the highest example of its particular type. . . . Areas whose principal qualification is adaptability for recreational use are not, of course, of National Park caliber. Proposed parks are measured by the standards set by the major National Parks of the system. Therefore, the requirements are exacting. As long as these standards shall prevail, there is no danger of too many national parks being established, or of the excellence of the present system being lowered."

Everyone should have such experiences, and, in addition, should have as much relaxation as pocketbooks and time permit. I believe that as cathedrals of nature the great parks are going to be taxed to their capacity and that the function of providing places in which people can play, that is, outdoor recreation, must be considered as one of the multiple uses of the forests.

This principle of multiple use is basic in our philosophy of national forest administration. It seeks to harmonize the practical needs of people with the ideally best use of land. Thus, an important part of the lumber industry of the West is dependent on national forest lands for at least a part of its source of raw materials. On the 133 million acres of range land within the forest boundaries, twenty-six thousand operators graze 12 million head of animals. This includes 12 per cent of all the cattle and 23 per cent of all the sheep in the country. If this livestock were to be cut off from national forests, the whole economic life of the West would collapse. Protection of the headwaters of navigable streams is another phase of the multiple use principle. It was the original reason for establishing the forests and as the years have passed has assumed greater and greater importance. And the agricultural life of the West, too, is intimately related to national forests. Many of the most pro-

ductive farm lands depend for their water, which alone makes them usable, on reservoirs located within forests. In this part of the country the income of an increasing number of farmers is being supplemented by wages received for work done in the forests and from the small wood-working plants which use timber from the forests.

But the use of these vitally important resources does not preclude recreation as an important use. Last year a couple of million people camped, picnicked, and visited on the San Bernardino National Forest. This was in spite of the fact that reservoirs on this forest have for many years supplied vital water needs for Southern California farms; in spite of the fact that more than 1700 head of livestock graze on this forest; and in spite of the fact that several mines have been developed here. Moreover, the Forest Service has set aside many natural areas which are closed to all forms of resource harvesting. In these primitive areas the enjoyment of the primeval is a basic consideration governing their administration. To me this seems compatible with the multiple use principle.

Referring again to the metaphor of the slide rule, with land resources on one side and the human needs for recreation and culture and for the basic necessities which certain kinds of land can supply on the other, I have already said that when I compute the future value of x for the great cathedrals of nature I get an estimate way beyond the capacity of the parks. When I seek the value of x for the kind of recreation that the National Forests can supply as one of their multiple uses I get a future value which will require continued development of these resources in the forests. The parks and the forests are not competitive. Each form of land use, the special use and the multiple use, supplements and complements the other.

Now, let me return to the side of human needs. I said the natural resources should be used for recreation that people may have a good time, but that in addition they should be used to create. To create what? In answer I shall state two propositions that I hold of great import.

First. Science and man have not as yet come to terms in contemporary civilization. Science keeps crowding in upon us, shattering our old ideas, upsetting our traditions, increasing our doubts and making us wonder if there is unity and value in the world about us. Science has three sides. There is the practical side, its application to man's needs through technology and applied science. There is the side of curiosity, exploring the unknown. Then there is its philosophical, spiritual, or, if you please, its religious side. If we are to live in an age of science we do not have a choice from among these three sides. Since that is determined we have the task of producing a philosophy of life which is adjusted to nature as revealed in science and of making this philosophy support a religious attitude which gives dignity to nature and hope to mankind.

Second. I think 98 per cent of humanity must get most of this philosophy and religion through the scientific interpretation of nature and through contact with some of the striking beauty and wonder spots in nature. In an address, "*Science and Human Values,*" Dr. John C. Merriam, President of the Carnegie Institution, said:

> Science does not presume to interpret personal devotions or the belief in any philosophy or religion. It does say that each of us lives in a universe that is marked by unity and continuity, in space, time and apparently also in meaning. What the scientist finds contributes to understanding the world of things and people. It may change our point of view in many ways, even giving us more faith in the order of the world in which we live, or perhaps more hope for the future of humanity, or more charity for a suffering next-door neighbor.
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> As I see the situation, the science, philosophy, art and religion of the future should be built in such a manner that each may contribute its part to a structure that will give a safer and more pleasant abode than any that man has thus far designed.
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> One of the greatest advances of all times was that expressed ages ago in the view that there is in the universe one power in many forms, or in terms of religion one God instead of many warring deities. It may be in order for mankind to make this discovery anew or from time to time, when unity in views of the world and in belief seem threatened by erection of too many temples to deities of varying and perhaps inconsistent missions, in a world that so far as nature is concerned has operated as one system since times began.

In large measure my hope for the future is based upon our taking seriously what Dr. Merriam has said. It is a coöperative task. The science teachers in the public schools are doing a far better job teaching science than was done a decade or so ago. The Science News Service is gradually feeding to the press the story of science. The radio is doing something in a very small and feeble way. These will help but, after all, people have to get this philosophy and religious attitude out of the book of nature itself. I congratulate the Park Service for what it has done to help people in reading the book of nature. Even so it has a long way to go. The Forest Service has not really started yet. I think it should start and I hope it will find ways to push this program.

Most people are not well enough versed in science to read the book of Nature—to enjoy Nature through understanding without a teacher. Ways must be found to have teachers at hand everywhere. Techniques must be found to tell the geological story and the biological story wherever there is an interesting page in the book.

There should be something, let us call them "nature observation stations," all through the forest recreation areas. I have in mind a kind of permanent exhibit, dignified, simple and clear, and harmonizing with the landscape. These should tell the nature story, should point out and explain the geological phenomena, the plant society, etc.

But I would go beyond the parks and forests. Why should not Congress give Dr. Mendenhall the funds with which to lay out a great national system of geological education on all the U. S. numbered high-

ways? Dr. Mendenhall is the son of a West Virginia farmer. He knows how to talk geology to us farmers. Have him call in the state and Federal scientific agencies to help in these "roadside science observation posts." Let the Forest Service tell about the trees here and there and the Biological Survey about the wildlife that is and was, and the anthropologists about the Indian cultures that are and were. This philosophy and religion of science and nature is so important that it should be built into our national pattern of ideas as fast as possible.

This is one form of land use. In developing it let the Park Service lead the way. And let the Forest Service add it as another of the many uses in its basic principle. If advanced in this way both parks and forests will return to the Nation significant contributions out of all proportion to the money involved. And the people of the land will gain a new and satisfying understanding of the world in which they live.

Qualifications for National Parks

O. A. TOMLINSON, Superintendent, Mount Rainier National Park, Longmire, Washington

THE National Park Service administers a variety of land areas, all of which, regardless of their type, size, or location, are fundamentally similar in three ways:

(1) Their features and the public benefits derived therefrom are of national significance.

(2) They are administered with the preservation of their intrinsic values uppermost in mind.

(3) Their development is governed by public interest in the features included, but in a manner that leaves such features unimpaired for future use.

The principles of national park administrative policy are clearly different from those practices of administration which may apply to other types of Federal lands that are maintained for commercial utilization of their varied resources. These clearly defined principles serve as a guide in the future selection of areas which may be added to the national park system.

At the present time, the National Park Service administers nine types of land areas, aggregating a total of 26,697½ square miles. The national parks, of which we now have 26, and the national monuments, numbering 74, are the two principal units in this system. However, there are 42 other areas such as national historical parks, national military parks, national battlefield sites, national cemeteries, national capital parks, and miscellaneous national memorials which, though reclassification may be required in some instances, are, on the whole, logical components of the national park system as measured by the principles of administrative practices mentioned.

These areas are, broadly speaking, basically recreational, but in these instances one must not confuse the "playground concept" of recreation with the more permanent and fundamental benefits that may be derived from their educational and inspirational values. These are the features which the National Park Service seeks to develop and foster. The recreational objective is the dominant one, although purely recreational elements are inseparable and cannot be overlooked.

Each of the present areas now included in the system is unique or distinct in some particular way. Each offers a particular segment of an interesting story relative to the geology, biology, archeology, or history of our nation which, when complete, will present coherent, dramatic, understandable stories of the great truths of natural science or of the progress of civilization in our country in their entirety. As the various areas in the national park system are today, there are many "blanks" in these geological, biological, archeological or historical narratives. Many vital chapters of the completed and coherent sequences which are desired, are still missing from the national park system. Fortunately, a great number of these missing units are exemplified by the features of land areas which exist in our country, and after several years of careful investigation, the National Park Service has tentatively selected the most representative which it is hoped will be included in the national park system of the future. It follows a broad, well-rounded interpretative system of nationally significant areas by which such highly instructive and inspirational things as the story of the earth, the materials of which it is composed, the forces which shape its surface, the forms of life which formerly inhabited it, the inter-relationship and inter-dependence of all things in nature may be told. Such a system should be one of the most far-reaching and inspirational educational forces which the nation may possess.

In passing, it must be stated that the dramatic characters of magnificent scenery are not in themselves the primary attributes which are being sought. The magnificence of the Grand Canyon, the grandeur of a great glacial system and mountain, such as exists at Mount Rainier National Park, a spectacular remnant of an ancient civilization as contained in Mesa Verde National Park, the immensity of the giant sequoias, to mention a few outstanding examples, are but parts of a complete story. To be such, they may be very vital parts, but they are not complete in themselves. These need to be supplemented by other areas, which though not as dramatic, convey a necessary part of the completed message.

In the Pacific Northwest the geologic and biologic concepts of a coherent system of national parks and related areas require the inclusion of the proposed Mount Olympus National Park and the Cascade Crest region. The former includes the present Mount Olympus National Monument and when enlarged will embrace not only a vital unit in the

geological story, such as the significance of the sedimentary rocks, earth sculpture and glacier areas, but also vital units in the biological story in the preservation of considerable areas of typical northwest rain forests, including the famed Sitka Spruce, Western Hemlock, Western Red Cedar, and Douglas Fir, which attain perfection in this region. In the latter case, concerned with the Cascade Crest area, we have glacier-clad volcanic cones of Mount Baker, Glacier Peak, Mount Adams, Mount St. Helens, Mount Hood, and others, which, as links in a volcanic chain which surrounds the Pacific Ocean, supplement the vital story of volcanism in the Northwest. Here too we have vital parts of our story of glacier erosion, for in the Pacific Northwest exist the greatest areas of glacier ice in the United States, exclusive of Alaska, together with some of the significant features typical of erosion by glaciers.

Certain swamp areas in the south are significant biological units in the proposed system harboring, as the areas do, specific plant and animal life peculiar to that environment. Likewise, extensive ocean beaches are significant in the biological and geological concept, such as the Cape Hatteras area and certain significant locations along the Pacific Coast. Representative areas in the great plains region are of vital ecological significance, and were forcefully brought to the fore in recent years through publicity of the "dust bowl" problems.

These and many other units having singular important national significance from an educational and inspirational angle should be included. The question naturally arises that such a program of acquisition may result in cheapening the national parks, and while we should not relax our vigilance in preserving national park standards, this program, if based upon a fundamental educational concept, need offer little if any possibility of such a danger. In fact, a coherence of the completed plan will raise rather than lower the high standards of the national parks and result in a broader and more significant social and economic benefit to our people.

In establishing the older scenic parks, it was hardly possible to anticipate the changes that a few decades have brought in the mobility of the people or with what ease and in what numbers they were to come to their national parks. It was hardly possible to estimate the influence that a fully developed civilization was to have upon the wildlife and the natural conditions. Insufficient attention was given to boundaries, due largely to the fact that in most instances the territory outside the parks was almost exactly the same as was within. As a consequence there has developed need for many changes in the sizes and shapes in a number of the older parks. Our aim is to secure the best use of the lands considering the nation as a whole and looking to the future as best we may.

A National Park Platform

MRS. ROBERTA CAMPBELL LAWSON, President, General Federation of Women's Clubs

THE General Federation of Women's Clubs has long supported a progressive program in its Conservation Division which would impress upon its members the dependence of our country upon its natural resources—a program that would safeguard and still encourage the intelligent use of our natural resources with the least waste and abuse, and by so doing assure us a prosperous, economically safe Nation.

We have appreciated the fact that the United States Government has established and maintained for over forty years a system of national parks with high scenic values, possessing as qualifications extraordinary individuality and outstanding natural features—examples of the virgin soil and vegetation in this country as our forefathers found it.

We also appreciate that these areas in their conservation and scenic standards have furnished enjoyment, educational advantages and inspiration to the Nation as a whole.

The General Federation of Women's Clubs has for the past twenty-five years staunchly upheld the fine standards set by the National Park System and has assisted during that period in defending these established standards from attacks which have sought to look for local gain and to lower national park values.

Our program opposes commercialism which would lower these high standards, and supports that which would further the educational and inspirational mission of the system in order that national park integrity may be maintained and its ideals preserved for all time.

MRS. WILLIAM A. LOCKWOOD, Chairman, National Parks Committee, Garden Club of America, New York City

WE ARE idealists, but we rather pride ourselves upon having common sense. We would like to be called common-sense idealists.

We wish our parks to benefit "all the people," but we set no time limit which would include only this generation. We wish the parks for "all the people for all time."

We look forward to the day when the fifteen million and more visitors will not want to dash through the parks at sixty miles an hour or care principally for the tag which means they have "done" the park but that they would have a keen appreciation of what the parks have to offer.

It is in order to preserve the parks for such a time that we are idealists.

Many may wonder why The Garden Club of America, an organization of amateur gardeners, celebrating its twenty-fifth birthday this year, is so deeply interested in our national parks.

One of its objects is the preservation of native plants and birds. This had led to a conservation department which has been active since the beginning.

In the early days of the organization the suggestion was made that the preservation of the Redwoods of California be one of our objectives. At the annual meeting of the Club in Seattle in 1930 it was decided to raise funds to purchase and present a grove to the State of California for preservation in its primitive state for the use and enjoyment of future generations. Eighty-five thousand dollars was subscribed. Seventy-five thousand dollars was added by the State and 2,500 acres were purchased in the Bull Creek area. Later 600 acres were added.

The question then arose as to the method which would preserve the natural beauty and yet make the area available to the public.

Immediately The Garden Club of America became national park administration conscious.

The larger part of our tract lay across the Eel River. This was a raging torrent during the rainy season. A bridge was necessary. Funds were contributed for a permanent structure. A plan of a steel bridge was submitted which would be of sufficient height to escape floods.

It was suddenly realized that such a bridge would be entirely at variance with the object of keeping the grove primitive and would be decidedly out of keeping with the surroundings. Therefore this plan was discarded. A simple suspension foot-bridge, which is removed during high water, was substituted, and a row boat used for transportation during the rainy season. A roadway was planned which would bring visitors not caring to use the bridge by motor to the back of the grove where trails would lead through the forest and to a natural amphitheatre. Here the dedication exercises were held. These trails preserve the ground-cover and by keeping motors at a distance insure silence, so necessary to the full enjoyment of such areas.

Our problems made our members mindful of the complications involved in park administration and also made us the more determined to use our influence to set aside more and more of our superlative areas for preservation from thoughtless commercialism which would use up in one generation that which should be a heritage of future ages. We may not reproduce what we now have; once lost, such conditions which it has taken centuries to evolve are lost forever. Both science and future generations would be the losers.

We know the high standards set by those who fought for and dedicated our parks and appreciate what the National Park Service has done and is doing to maintain these standards.

We also know of the great pressure of commercial interests to make use of areas so set aside. We realize the need of funds to maintain the parks. However, we do not feel sufficiently informed, and hesitate to recommend a program, but because of our great interest and deep concern for the future of our parks we make the following suggestions:

1. That our great primeval parks be segregated; that regulations be made for their protection suitable to their particular needs; that other

parks and monuments, historical and otherwise, be governed by regulations suitable to their needs.

We do not believe the same regulations should apply to each type of park, nor that the same training is required for the policy making or administration of such divergent needs.

We ask that those in whose care our primeval parks are entrusted have not only botanical and other scientific knowledge but also have a keen appreciation of the importance of wilderness in its primeval state as a study ground for the story of the cycles of fauna and flora as well as for the inspirational beauty therein contained.

2. We have so recently been called upon to subdue the wild that many have become unmindful of the value of our great primeval territory, and we urge that this importance be brought to our people through those who make and administer our laws. "Land Use" may have value in other ways than producing lumber, irrigation or water power.

3. As a general rule we are opposed to high-speed roads piercing the hearts of areas set aside for preservation. We urge that roads of access be placed in the less dramatic areas and that trails lead the visitors to the great scenic spots. The noise and excitement of motors is not conducive to contemplation.

4. We urge more nature study in our schools in order that our children may learn to understand, and therefore to appreciate, the wonders and delights to be found in our parks. Destruction comes from ignorance. This is exemplified by an incident which happened a few years ago when I was at Magdalena Bay in Spitzbergen with a large group of visitors. We landed by means of an improvised landing, as few ships went there, in order to view the glacier more closely. There were no trails. The crowd scattered helter-skelter over the area so as to reach the edge of the ice. Perhaps I was a little more garden-minded than glacier-minded. My eyes dropped to the ground-cover.

Immediately I began to put into my pockets a variety of tiny blooming plants. When I returned to the ship I put them in little dishes to watch their growth. It took eleven plants to fill a soup dish. Having a magnifying glass and a botany with me, I began to study those little plants. Soon many of the passengers were tremendously interested, though they had never seen any plants at the glacier's edge. It was simply a matter of not being trained to see. We should like to have a larger number of nature teachers and more nature camps where teachers and field naturalists may be taught so that they may in turn teach and inspire the young. This The Garden Club of America is attempting to do but it may in no way cover the need.

5. We further suggest that the National Park Service be so increased and rewarded financially that both men and women may find it worth while to seek a career in this Service, a civil service, always non-political.

6. We would stress the re-creational or inspirational value of our

primeval parks rather than the recreational or playground meaning of the word, which signifies amusement other than that proffered by the parks themselves.

We believe that golf courses, movies—not educational,—dancing, and the like should be confined to concessions on the outskirts of the great parks, thus leaving the superlative areas free from distraction in order that nature may silently speak for itself.

We are an organization of some seven thousand women, scattered over the entire United States. We have no ax to grind. Many of us will never see our wonderful parks, but we offer our aid to those with similar beliefs and purposes.

A. D. TAYLOR, President, American Society of Landscape Architects, Cleveland, Ohio

LANDSCAPE architecture is one of the major groups keenly interested in the preservation and proper development of national parks.

A platform is a policy. Our policy is an established and a definite one. This policy is a declaration of principles in which the American Society of Landscape Architects, speaking through me, officially expresses its belief.

The American Society of Landscape Architects believes that additional land for national parks should be acquired until the available superlative scenery of national park quality is under the control of the National Park Service.

This Society also believes that there should be rectification of boundaries and adjustment of areas between the jurisdiction of the National Park Service and other Governmental agencies, in order that the type of administration of the land concerned, may be most appropriate to its best public use.

We suggest that a National Committee be appointed by the President, empowered to make a comprehensive study of all the national park and national forest areas, and as a result of such study to recommend upon those areas of superlative scenery of national park calibre which should be in national parks, and upon those areas now within the national park boundaries which may be appropriate to some other use for the best interest of the public.

We further believe that national park areas should be limited to lands of extraordinary significance, with qualities of superlative scenery, the preservation of which should be a matter of national concern.

In accordance with a comprehensive design for the development and preservation of national parks, works of construction should be limited only to those that are necessary to make the parks useful and accessible without serious damage to their scenic character.

The forms of recreation permitted and the works of construction undertaken, should be such as are not inconsistent to the extent practical

with the preservation of natural beauty, and with those recreational purposes incidental to the enjoyment of that beauty for which the national parks were created.

Since the most unusual and beautiful natural scenery will attract visitors from all parts of the country, as well as from foreign lands, the responsibility for preserving outstanding examples of such scenery should rest with the Federal authorities, acting through the National Park Service. Conversely, the preservation of lands by the Federal Government as a national park can generally be justified only when their significance is nation-wide. Every proposal for the addition of another national park should be scrutinized lest it lead to the admission of an area of little national importance and form a precedent for the future admission of parks of inferior and inappropriate quality.

The National Park Service and its supporters are frequently compelled to resist attempts to promote within the national parks unnecessary works of construction or of destruction, such as roads, buildings and the clearing of forests. It should be remembered that the justifying purpose of a national park is to protect, preserve and make permanently available for observation, enjoyment and study by the people of this and future generations, supreme examples of certain natural conditions, examples so rare, so precious, each in its own way for the inspirational quality of its scenery and otherwise, as to make it a matter of truly national concern thus to protect them.

Attempts are being made from time to time to obtain lands or privileges in the national parks by power, irrigation or other interests, which are not merely in themselves detrimental to the parks, but which form dangerous precedents for other encroachments.

Introduction of incongruous recreational functions, and with them, a class of visitors lacking sympathy with the primary purpose of the national parks would greatly diminish the enjoyment of the parks, and increase the difficulties of management without compensating advantage.

There was a time prior to the depression when the American public had a full understanding of the activities of the National Park Service and the ideals for which these activities stood.

During the emergency period it was necessary for the National Park Service, as a Federal agency, to step into the breach and to take over many administrative responsibilities, some of which seem quite foreign to national park ideals as theretofore construed by the public. There was no other Government agency qualified to meet these emergency requirements. It is hoped that the National Park Service will prepare a policy to be made available to the public setting forth the range of the activities to be included in its program and again to restate in whatever modified form is necessary the ideals and objectives of the National Park Service.

OVID BUTLER, Executive Secretary of The American Forestry Association

THE American Forestry Association in 1930 endorsed in principle the statement of National Park Standards promulgated by the Camp Fire Club of America. That was and still is a good statement. We have never withdrawn our endorsement of it.

The American Forestry Association, moreover, does have a national park concept—a concept that visions and holds in focus quite clearly, I think, what national parks are and what they should continue to be. That ideal or concept is our keel of guidance. It is written in various resolutions, statements and actions of our Board, the latest of which was an uncompromising stand, so we are charged, in defense of Rocky Mountain National Park.

In a deeper and more human way, our concept is unwritten in the minds of men who through the years have served the Association as Directors and with whom I have had the honor and privilege to be associated. My task, therefore, is to interpret that concept to you as best I can in a few paragraphs.

We conceive the national parks in the spirit of their birth—a spirit that has carried down to us from a mountain meadow in Yellowstone where Langford, Judge Hedges and his party camped the night of September 19, 1870. Those men, it should be remembered, were living their lives in a great, sparsely settled country. The common run of soil, mountains and trees as God had made them were nothing new to them. But when after days of hardships and dangers in a country that was all wilderness they came upon boiling springs, spouting geysers, giant falls and canyons, they knew without anyone telling them that they had come into the presence of something profoundly different, for within their hairy chests and tired bodies they felt a strange uplift.

The things of wonder that lay before them were theirs for the pre-empting but no, they sensed they were dealing with something priceless —a masterpiece of creation that ought to be preserved for all time for all people. Fair to conscience and fair to country, they forthwith renounced thought of personal gain and around the camp-fire that last night resolved to do that very thing.

Then and there was born an idea which Congress a few years later gave the name National Park and made it the symbol and instrument for eternal preservation of those rare examples of unmodified nature within our country that transcend mere scenery and reveal to mankind new horizons of creation.

Call it old-fashioned, if you will—outmoded by these changing times —that nevertheless is the national park concept as I have come to know and feel it which the Association holds today. Our principles include:

(1) Keep national parks always a system of natural masterpieces. Therein lies their national distinction, their national worth and their national reason for being. And therein lies their best hope of preservation.

(2) Admit to the system no new park or addition that will cheapen or depreciate its meaning and its inherent worth. Diversion from this policy is diversion from purpose and exposure of all national parks to easier invasion by commercial and local interests.

(3) With uncompromising fidelity to their purpose and their meaning, protect all national parks against all forms of use, economic or otherwise, that will tend to modify and destroy the things they are dedicated to protect and to preserve. It is more important to America that a national park, rightly conceived and maintained, endure a century even though sparsely visited than that it be spoiled by roads and crowds in a decade of confused living.

(4) In the use of the parks preserve as unmodified and unharmed as humanly possible the craftsmanship of the Creator and its environment of wilderness, birds and animals. To this end place emphasis on organized knowledge of the meaning of the things in the parks rather than on organized crowds and organized amusements.

(5) In respect to commercial or economic invasion of national parks adhere to a non-compromising position. This position, however, can be held only as long as national parks stand for those things that in the conscience of the people are priceless to the nation as a whole.

HORACE M. ALBRIGHT, President American Planning and Civic Association

THE American Planning and Civic Association for more than thirty years has cherished high standards for National Parks. Sixteen years ago, its predecessor, the American Civic Association, issued a PARK PRIMER in which this definition was given:

> A National Park is an area, usually of some magnitude, distinguished by scenic, scientific, historic, or archeological attractions and natural wonders and beauties which are distinctly *national* in importance and interest, selected as eminent examples of scenic, scientific, or historic America, and preserved with characteristic natural scenery, wildlife and historic or archeological heritage, in an unimpaired state, as a part of a National Park System for the use and enjoyment of this and future generations.

The Association has adhered to that definition as a gauge to measure new areas proposed for National Parks. You will note that no mention is made of primeval areas. The Association recognized that there were few, if any, primeval areas left in the United States. When I hear friends of the National Parks adding to this definition and to the one which was published by the Camp Fire Club somewhat later a conception which is so rigid that it would disqualify all of the remaining superlative scenery in the United States, I cannot help feeling that a mythical Utopia is being set up that can never be realized. In practice the strict application of the primeval requirement would mean that the very finest scenic areas in the country could not become National Parks but must be administered, if at all, for some other purpose. Of course most of

these areas not already in the National Park System lie in the National Forests which were established for quite other purposes and which are not administered primarily to preserve natural conditions.

As a matter of fact, the recognized National Parks, which are held as measures of what new national parks should be, were not secured while still in their primeval state. Even in Yellowstone, Jim Bridger killed mink, marten and beaver together with other fur-bearing animals and so did other trappers of the Hudson Bay and American Fur Co. The original animal conditions in Yellowstone were already modified before the area became a park. Yosemite was grazed by sheep for years prior to its reservation as a national park. John Muir himself herded sheep in the Tuolomne Meadows and timber was cut in the valley. Cattle grazed on the lower levels in the park until the last six or seven years, when fences have been put up and some of the private holdings along the government lines extinguished. Yosemite was certainly modified to a decided extent before it was made a National Park.

In Glacier National Park there was an irrigation project and there were farms, most of which still exist. In Mount Rainier there were mining claims. We have attempted to have them cancelled but they are still held valid. Grand Canyon was mined and grazed for years.

There is no unmodified territory. There never has been any unmodified territory since the white man began to fight the Indian. And in the Sierra and Sequoia country there long existed the practice of burning over the land. If the idea of requiring unmodified territory as a requisite for new National Parks is applied rigidly, there will be no more National Parks. In any case, in order to create a new National Park, we must overcome the objections to the inclusion of forest areas, grazing areas, mining claims, hunting territory and other commercial and popular uses. It is a very simple matter to round up petitions of sheepmen, cattlemen, lumbermen, power men, hunters and others who want to use the territory which may be proposed for the National Park System. So the net result of applying the unmodified-territory theory is that those who advocate it are in fact aligning themselves with the other national-park objectors to prevent any more areas from being incorporated into the system.

I hope that some day the United States Forest Service, with its friends such as the American Forestry Association, and the National Park Service and its friends, such as the American Planning and Civic Association, will sit down together and see if some agreement cannot be reached on the areas which rightfully belong in the National Park System.

But I beg of you, do not adopt obstruction policies and do not define National Parks to the point where there never can be any new parks or additions to existing parks. Once the System is completed, we must see that the non-conforming uses are abated and we must foster the reversion to a natural state of injured areas in the parks.

The Future of National Parks in Region One

CARL P. RUSSELL, Director, Region I, National Park Service, Richmond, Va.

TO UNDERTAKE the "forecasting of the National Park System future" lays one open to all of the dangers which Dr. J. Horace McFarland, last year, so effectively observed, beset the prognosticator. But to get an estimate of what actually lies before us is to use our intelligence. In quite the same manner that the National Park Service bases its annual improvement work in existing parks on *master plans*, so, I think, all of us who are concerned with the ultimate development of the National Park System may well concentrate on the projection of a "master plan" for a national system of reservations in which the defined objectives of the National Park Service may find expression.

I do not mean that this broader master plan should be made up of portfolios of drawings on which details of proposed physical developments are prescribed. I have in mind a survey of the possibilities of adding new areas to the existing park system in such manner as to enable the Service to present the well-rounded story of America. Based on this survey a program of land acquisition should be planned; acquisition which will actually enable us to portray, by striking examples, the story of earth forces and the progress of civilization in this country. Director Cammerer in his addresses has several times said: "The master plan (for existing parks) when properly handled, is the best single picture of ultimate objectives yet devised in simple form to serve as a constant guide for all concerned." I believe that a master plan for the Service as a whole will likewise become a practical guide which all of us and our successors can use to advantage. The Park, Parkway and Recreational-Area Study so successfully pursued by the Service offers evidence of the practical results obtainable in long-range planning; it is actually a means of securing a perpetual inventory of recreational possibilities in the Nation. The Historic and Archeological Site Survey is another example of what is being done in the general field of national park planning.

In connection with the last named survey, the Branch of Historic Sites and Buildings and the Secretary's Advisory Board have had some 600 sites under consideration, two-thirds of them being in Region One. Forty-nine of these have been acquired by the Service, 114 have been studied and classified as desirable additions to the parks system and the remaining 450 have yet to be studied.

I think I am correct in stating that the present "catch" of proposed historic sites results from a rather general casting of nets and a wholesale hauling in without much regard for interrelationships. A recently projected plan for the survey of historic sites will change the catch-as-catch-can procedure to a more orderly system of selecting historic areas for

inclusion in the national park system. Our historians have shaped a rather full chronological outline of United States history. With that outline as a basis, the running account of history is organized into chapters. The events that find places in a chapter can, of course, be focused upon certain localities. By taking these localities into consideration along with the study of the significance of the events, it becomes possible to arrive at conclusions regarding the relative importance of sites involved. The acquisition of historical sites thus becomes selective rather than collective.

A good demonstration of the effectiveness of this process of selection was given a few days ago when Dr. Ronalds, of the Branch of Historic Sites and Buildings, presented to the Secretary's Advisory Board an account of that "chapter" of our history which we call the French and Indian War. In his portrayal of the story, Dr. Ronalds focused attention upon the significant sites. Three of these sites, the most important of the ten, were not to be found in the miscellaneous collection of 600 or more sites previously proposed.

Other outstanding chapters in American history which find representation in Region One, and which are susceptible to the same searching analysis which was given the French and Indian War, follow:

Exploration and Colonial Settlement, 1565–1763
Southern Plantation System and Culture, 1607–1776
Preliminaries of the Revolution, 1763–1776
The War for American Independence
The War of 1812 (so-called Second War for American Independence)
The organization, settlement, and growth of the Old Northwest, 1787–1860
The settlement and culture of the Old Southwest, 1789–1860
American Political and Economic Thought, 1782–1860
Domestic Affairs from 1789–1830
Domestic Affairs, 1830–1860
The War between the States
Rise of American Science and Industry, 1789–1938, or
The Economic Evolution, 1789–1938.

In shaping a program of historical site acquisition, we keep in mind the fact that warfare has been but one phase of our history. Domestic and industrial aspects of American culture, archeological and ethnological evidences of our predecessors on this continent, and our friendly relationships with adjacent neighbors and other countries constitute phases of our developing characteristics which are quite as important from a National Park Service standpoint as are spectacular military or naval affairs.

To attain the ends desired it will, of course, be necessary to make investigators available for the studies. But the expenditure of funds for this purpose now will mean orderly progress and should effect notable saving in the long run. Whether the studies be made on a regional basis or from a central office is immaterial. However, should the Regional

Offices assume responsibility for the work, additional staff members must be employed. The present regional staff of historians is not adequate to meet current demands of its services. In Region One we have 63 Federal areas, only 5 of which are not primarily historical in values. The present staff of three regional historians finds it difficult to give full review of existing work programs and maintain satisfactory coördination of current field activities. Here, where historical values are paramount and proposals to add new areas are so predominantly problems of the historian, one man, either from the Branch in Washington or from the regional staff, should be available to devote his undivided attention to the appraisal of proposed new areas.

OPPORTUNITIES TO ILLUSTRATE GEOLOGICAL STORIES

If our ultimate park system is to be the integrated series of units that we visualize, it must contain certain areas in which the geological chapters find representation. Here again, if we are to make the best approach to our problem, consideration must be given first to the story of natural phenomena. If a geologist is commissioned to prepare a museum exhibit that will interpret the geological story of Grand Canyon, for example, he does not first of all prepare some illustrations and then weave a story around these pictures. His first step is to delineate the story and then make pictures that will illustrate exactly what should be portrayed. In the same way the National Park Service should proceed to define the story of earth forces in the United States and then select land areas which will illustrate the significant chapters. By such procedure will we acquire a coherent system of national parks and monuments that will exemplify the major themes of American geology.

THE WILDLIFE FEATURES OF PRIMITIVE AMERICA AS REPRESENTED IN REGION ONE

The great wilderness areas of the United States quite rightly are considered to exist in the West, yet, recently, Region One of the National Park Service has made its contribution to the conservation of wildlife. As studies of park needs progress it becomes more evident that even the eastern section of the country contains important wildlife areas—areas the significance of which is not duplicated in the existing western parks and monuments. The authorized Cape Hatteras National Seashore, for example, was first justified on its historical and recreational values. Now we realize that it has a wildlife value that equals or excels the first recognized values. It is the wintering ground for countless thousands of water fowl and its inclusion in the national park system will provide the Service with a most logical site for a national center for the study of bird migration. From the standpoint of spectacular wildlife features I am of the opinion that Hatteras will rank with the best of our wildlife

areas, and any of you here who have witnessed 10,000 Snow Geese arise in a body from their resting place on the Currituck dunes will agree with me, I believe.

In the future Everglades National Park we have a distinct fauna and flora, the preservation of which is quite as important as is the saving of the Yellowstone wilderness. In the proposed Santa Rosa Island National Monument, we find opportunity to feature a museum of the rich tropical marine life of the Gulf of Mexico. Some southern swamp with its cypress habitat should be preserved.

Acadia, Great Smoky, Kings Mountain, Fort Jefferson, Fort Pulaski's environs, the Orton Plantation and the hammock jungles bordering East Florida beaches each has a flora and fauna representative of characteristic portions of our country—each makes contribution to our attempt to preserve samples of the primitive American scene. Just as sound conclusions can be drawn as to the relative values of historical sites after a comprehensive survey has been made, so should a broad review of the general ecology of Region One precede the selection of biological areas to be added to the present parks system.

I think I have made one point clear—that we must organize our efforts if we are to make sound, constructive growth that will stand under the current criticism of the so-called "purists" and likewise meet the test of trial through the coming years. To organize for such studies as should be made costs money, yet the immediate cost will be trivial as compared with the future drain that will be levied upon the Service if we are inefficient at this time. Probably a score or more of new areas should be added to the present system of parks and monuments in Region One during the next few years. I say "should be added" meaning, of course, that the proposed growth is desirable if the Service is to meet satisfactorily its obligations in preserving and presenting "by striking examples the story of earth forces and the progress of civilization in this country."

Costs of developing and maintaining the new areas for public use introduce a problem that may require study by another group of specialists. I like the Director's view of this matter as he expressed it last year, "A combination of appropriations and fees appears to be the most satisfactory means of financing recreational areas. It is the financial basis upon which the National Park System is being built and is, in fact, an essential element of the park form of land use. The core of the park idea is that the area shall be largely self-supporting but not at the expense of any feature in it."

I have said nothing about future coöperation of Region One with state parks because that phase of our program was not provided for by those who planned this particular discussion. Likewise administrative problems as they bear upon the relationships of the regional staff to park superintendents and coördinating superintendents find no place

here. It is too early perhaps to anticipate the details of future interrelationships of these units within the regional set-up, but by next year I hope discussions of these matters may be provided for in special sessions of the Superintendents' Conference.

CONCLUSION

Please permit me to summarize by repeating those points that I wish to emphasize:

1. A broad survey of American historical, archeological, geological and biological features should precede any program of land acquisition for the National Park Service.

2. In Region One historical areas predominate. Of 63 existing parks and monuments, 58 are primarily historical in values.

3. 332 new historical areas have been proposed for addition to Region One. Thorough analysis of the history of the Region will increase this number.

4. Cultural aspects of the American story should receive proper recognition in the future system of parks and monuments.

5. Geological surveys will reveal gaps in the present system of national park areas.

6. A broad review of the general ecology of Region One should precede proposals to add biological areas to the existing system.

7. Acquisition of any or all new sites should be selective rather than collective.

8. Undue worry on the part of those who fear the possible inclusion of substandard areas in the National Park System should be quieted. I cannot do better in concluding than to quote this meaningful paragraph from George Wright's "Philosophy of Standards for National Parks," 1936:

"I no longer worry as I used to for fear the National Park System will be loaded with inferior areas. Once this was a real concern. Now we have a system of national parks and monuments which in their aggregate set the standard. We have a National Park Service now, and park bills must run a formidable gauntlet of committees. These bills are referred to the Secretary of the Interior, who refers them to the National Park Service. It is next to impossible today to establish a park over unfavorable report of the Department. What if a substandard area should slip in? This would not be calamitous. The failure to save Mount Olympus' forests, the Kings River Canyon, the Okefenokee Swamp, and a host of others just as valuable would be the real calamity. Let the friends of our national parks leave it to the National Park Service to safeguard itself against intrusion of trash areas and devote their energies instead to completing the parks system while there is still time to do it. The inclusion of Platt is not a burden upon our consciences; the failure to save one good example of our prairie grassland should be a very real cause for mental anguish.

"The sound and the fury rage around such academic questions as to whether this mountain or that is the best of its kind, drowning out the echoes of the axes that eat their way into the hearts of four-hundred-year-old monarch trees on their slopes. When the argument is ended, neither mountain will be fit for national park status."

The Future of the National Park Service in Region Two

THOS. J. ALLEN, JR., Director, Region II, National Park Service, Omaha, Nebr.

IN REGION II we have new areas being studied and considered. If you will look back into the history of the national parks and the National Park Service, you will find it was within the boundaries of what is now Region II that the national park idea started. Some of my old friends in Hot Springs, Arkansas, and Superintendent Libbey of Hot Springs National Park probably claim Hot Springs National Park as being the first national reservation, and that is true, but of course we all admit that Yellowstone in reality was the first national park.

When we talk of growth and speak of new areas, Region II must be considered as the starting point. Studies are now being made and reports being prepared on the possibility of including the areas of Wind River Mountains in Wyoming, of the Flathead country in Montana, within the National Park System. The State of Wyoming is coöperating with the Park Service toward the preservation of Old Fort Laramie and the historical aspects of the Old Oregon Trail where it crosses the region. There is the hope of rounding out the boundaries of Rocky Mountain National Park, and of Grand Teton, and perfecting Yellowstone limits to a perfect natural limitation. There is already being started the purchase and development of the Homestead National Monument with all the associations that are tied into the first tract of land granted as a homestead claim by the United States Government. In addition, there is a movement toward setting aside an area of plains land which, if accomplished, would create a Grasslands National Monument, depicting the great buffalo range as found by the early pioneers.

You have therefore, in summary, an idea of what might happen in Region II, which extends from the Rocky Mountain States of Colorado, Wyoming, and Montana, east to include Illinois, and which goes north from the Missouri-Kansas southern line to the Canadian boundary.

Geologic, historic, biologic, and recreational extensions are in view as a part of the entire program looking toward the completion of the National Park System throughout the whole United States. I dislike, however, to think of the future of the National Park Service in the area for which I am responsible, as being confined merely to enlargements and additions. There is a great deal that can be done toward the improvement of our existing areas, toward the better management of them, and toward making them of even greater service to the American public.

Since the days when Yellowstone was first set aside as a national park, our history has been one of growing popularity and of increasing attendance. There seems to be no end to this popularity, and no end to the increase which we will have in visitors. There is, however, a limit to any park's capacity, be it large or small. Already there are signs that in

some of our parks we are approaching that limit under our present methods of operation. No one desires to limit the use of the parks to an arbitrary number of individuals. It therefore means that facing the National Park Service is the problem of devising ways and means for handling our increasing population and still protecting our charges. It can be done and it will be done. The doing of it is one thing which I see in the future of the National Park Service.

Ahead of us also is the perfection of our parks and the continuation of them as the only areas in the United States which present a complete biotic picture. Like the park visitors, our wild animal friends are crowding us and are affecting not only our own areas but the surrounding lands outside of the parks. No problem in conservation is more interesting than this one. It will tax the best minds in the National Park Service and will call for assistance from leaders in wildlife management elsewhere, but its solution is part of our future. The housing of our park visitors at popular rates, the perfection of our ranger forces, the development of new means of eliminating forest fire danger from our forest, and the solution of the insect and tree disease worries, are all waiting for us.

On the outside are commercial interests desiring to take advantage of water-power possibilities within the park and monument areas, and to put to other local uses the natural features which the parks are intended and created to preserve. All of these things put together indicate a decidedly busy future for the National Park System and the National Park Service, not only in Region II, but in all regions.

All in all, it seems to me that we have stretching ahead of us the biggest job of conservation that ever faced any organization, and with no let-up, because national park work is never finished. Changing conditions make new problems and new solutions continuous.

A Forecast of the Future of the National Park System in Region Three

HERBERT MAIER, Acting Director, Region III, National Park Service, Santa Fe, N. M.

THE truth of the old saying that no one can forecast the future without knowing what has gone before finds no more honest application than it does among those who defend the national park system and constantly attempt to presuppose its future.

Today every member of the National Park Service who would contribute materially to the system must, most certainly, have full knowledge of, and respect for, its past—*but not live in it.* Fortunately, however, one of the outstanding characteristics among national park system proponents which has impressed me throughout some 25 years' association with the national park idea, is the inspired zeal with which they

have been reaching out into the future to turn into accomplishments their hopes for the system.

One recent accomplishment that emerges as a product of this foresight, is the regionalization of the Service in order to strengthen the administrative methods by which existing units of the system are defended, and the future of the system as a whole is currently given the constantly increasing attention required.

When considering the future of the national park system as represented in Region III—that is, the States of Arkansas, Texas, Oklahoma, New Mexico, Arizona, and the southern parts of Colorado and Utah—one finds a field of possibilities that past foresight has not circumscribed but that present vision is beginning to comprise. What are these possibilities?

In setting about to crystallize the *planned* future of the national park system in Region III, we first go to Nature because *Nature* provides the initial facts with which we work. And in so doing, it will be appreciated that in so far as ecological conditions are concerned, these States quite run the gamut of flora and fauna habitats. A total of twelve such distinct habitat types exist in this region, from that in Arkansas common to the Ozarks and from the Loblolly country of the Texas-Louisiana boundary westward to the Plains-Grassland habitat type that extends into the Dust Bowl of Western Oklahoma, the Texas Panhandle and New Mexico; and from the Desert Shrub habitat type in the southwestern part of the region to the Pinion-Juniper and Yellow Pine-Douglas Fir habitats of northern Arizona and New Mexico, southern Utah and southern Colorado. And it is significant from a conservation standpoint, that ten of these twelve ecological habitats are, fortunately, already represented in the five national parks of the region since, while various other agencies are working for the conservation of game animals, the National Park Service is practically the only agency in the region that is trying to conserve entire wildlife communities, that is, all native species of both plants and animals.

The problems of extensions to old existing areas is indicative of how the Service has progressed from arbitrary boundaries to boundaries based on extremely careful planning. Remember, Yellowstone was originally just laid out as a square around the lake, and the Service is perhaps not yet through trying to adjust the boundaries to biological and other necessary considerations. In Region III, consideration is now being given by the Service to extension problems in connection with all five of the national parks in the region.

In Grand Canyon National Park there is foreseen the need to include 150 square miles of the former Grand Canyon National Monument, adjacent thereto. The need here for including the additional area is based primarily on the scenic qualifications. The Inner Gorge at the Monument is extremely narrow, on the sheer walls of which at one point is

displayed what is said to be the finest example of volcanism on the North American continent. In addition to this, the extension will add to the park an excellent range for antelope in Toroweap Valley.

A block of about 24 square miles comprising what should have been the southeast corner of Mesa Verde National Park, has never been included in the park. The land is in the Indian Service and that Service has admitted that the land is of little value to the Utes. The extension would serve to round out Mesa Verde's scenic unity by taking in more of the mesa proper and it would extend that part of the park to its natural boundary which is the Mancos River, and which would simplify administration and protection. Mesa Verde has the worst fire threat in the region.

Platt National Park in Oklahoma, although only 848 acres in extent, reached a remarkable peak load of 284,000 visitors during the past year. A study of its problems was undertaken by a Washington office representative last summer and it is expected that the findings will shortly be forthcoming.

Hot Springs National Park in Arkansas, as most of you know, has a native land problem. In 1832, Congress set aside the land surrounding the hot springs as a National Reservation, stipulating that this land was not to be used for any other purpose. In 1874, however, by Federal survey, the townsite was plotted and 1551 acres including the valleys and the best of the land was given to what is today the business section of the city. The problem now is largely to obtain additional land on the surrounding mountains so as to give visitors greater recreational opportunity to get up out of the city which surrounds the Springs.

Considerable discussion has, from time to time, been evidenced in connection with a proposed major extension to Carlsbad National Park, but sufficient investigation has not yet been carried out to definitely determine its advisability. The new land would extend south up into the Guadalupe Range and apparently include additional large caverns that surveys may prove of sufficient value to warrant park protection. Furthermore, Carlsbad Caverns is located at the very edge of a wonderful game country. The valleys and canyons of this region tap the great faunal reservoir which spreads away to the south and down into Mexico.

As for proposed new national parks in Region III, two or three areas that have been investigated during the past year are now receiving major consideration from a standpoint of proper land use and as to whether they can be best conserved by the National Park Service.

At present there are no national parks or monuments in Texas—the largest State in the Union. The Big Bend area in southwestern Texas, however, was in 1935 authorized by Congress for national park status. Funds are now being raised for the purchase of 788,000 acres of land, by private subscriptions, to be later supplemented by a state appropriation. This fund-raising campaign was given an added impetus recently

when it was discovered that during Centennial year, the income to the State from tourist travel was greater than from its two other principal sources of income—cotton and oil. The international aspects of this project are intriguing. The Mexican government has agreed to set aside 450,000 acres on its side of the Rio Grande in the Del Carmen Mountains, in order to create an International Park in which the peoples of the two nations may mingle without annoying international restrictions. Director Cammerer has worked vigorously with the Mexican government in connection with this international project, and by invitation has advised on their national park system which includes approximately as many acres as our own. It would by no means be a difficult task later to construct a highway south from the Mexican area to join the present Mexico City highway at Monterey. Who knows but that this International Park may in time become the principal tourist gateway between the two countries?

Padre Island, immediately adjacent to the Texas Gulf Coast, is the only area in the region being considered as a possible national seashore park. This island, which is only a mile wide, has a perfect beach 120 miles long.

Thus far I have been leading up to the thought generally accepted that, regardless of what other considerations may be present in the future of the National Park System, a greater knowledge of the country as a whole and what each part of it is most useful for, will be the basic factors in our studies.

Of the 32 national monuments in Region III, 26 comprise the Southwestern Monument System under Superintendent Pinkley, offering a variety of prehistoric and natural phenomena nation-wide in appeal. The Southwestern Monument System is deserving of very serious thought and long-range planning since many of its units could easily be spoiled if made too accessible, or on the other hand, if left without adequate facilities. And this situation with the tremendous increase in travel in the southwest, is a real threat. Almost 300,000 persons visited the Southwestern Monuments during the year just passed. Certain of the monuments having a particular type of interest and most accessible to the public, lend themselves to immediate development. On the other hand, there is a group of four or five that Superintendent Pinkley feels should forever be held in their strictly primitive state. Then there is the group of three or four Reserve Monuments, as Superintendent Pinkley calls them, to be withheld from public access until all scientific study and excavation can be undertaken and completed.

While erosion and livestock contribute to the process of ruin disintegration, the greater damage is done by man. Looting of prehistoric remains has been a major outdoor sport in the Southwest that has been heartbreakingly extensive. Scientific publications of thirty or forty years ago deplore this evil. The Federal Antiquities Act of 1906 has

never really been enforced and cannot be to any great extent under present conditions. The National Park Service is the only agency whose job it is to protect these invaluable records of the past, but it has no jurisdiction over Federal land other than its own. Some few sites are protected to an extent by States and institutions, but these cannot carry on stabilization activities or provide adequate facilities for the visiting public. That the National Park Service should not go in and actually do major research excavation in the Southwest is a policy that has been generally recognized, and while the digging and the research may be the field of institutions, the preservation work is the duty of the National Park Service. Generally speaking, in order wholly to conserve a strictly primitive area, you could simply leave it alone. But a crumbling ruin needs sympathetic and highly technical attention.

There is now a CCC mobile unit of 25 Indian enrollees attached to the Southwestern Monuments under the immediate direction of an engineer and an archeologist. At least five such units could be profitably employed in the monuments and national parks in the region.

The question arises frequently in the lay mind as to whether the Service is trying to preserve too many archeological sites in the Southwest, and if duplication is common. No one has ever suggested that all of the Southwestern archeological sites be preserved—that would be an utter impossibility, even if it were desirable. Considering the distinct cultures and different peoples, there is no duplication.

I trust I will not be misunderstood when I say that the question has been raised as to whether the Service has realized the full responsibility and magnitude of the task involved. Most certainly the Service would do many things if it had the wherewithal. It is estimated that $100,000 per annum over a considerable period could be legitimately spent on preservation work in Region III.

Just how many and which monument areas should the Service acquire in Region III in order permanently to conserve the most worthwhile, will, as far as archeology is concerned, be answered by the Archeological Sites Survey, already projected for the Service. In the meantime, however, there are ten or more possible monument areas offering a variety of outstanding features that have been investigated and probably should be acquired at an early date in order to afford immediate protection.

In addition to these, extensions to nine existing monuments are of immediate concern. The principal ones are: Arches in Southern Utah; El Morro in New Mexico, and Rainbow Bridge, Chiricahua and Navajo in Arizona. Navajo, as an example, one of the most dramatic and isolated, is now in three widely separated blocks, each block of only about 40 acres. It is proposed, through special arrangement with the Indian Service, to unify the three blocks for necessary control of public access. El Morro, as another example, is a striking mesa point, on the

cliffs of which are inscribed the signatures of the Spanish conquistadores and of our own frontiersmen, but with a boundary only 200 feet removed from these inscriptions.

In Region III the report of the Historic Sites Survey now under way will give much consideration to possible national historical parks of which there are, as yet, very few in the region and which contrast with archeological sites. Some of the historic sites in Region III relate to the early conquistadores. Others are ecclesiastical, such as the three mission systems. A third group tells the story of the military posts that pushed ever westward and permitted the settler to take footholds.

Where historical areas are purely local in appeal, they should be developed and maintained by the States. But where there occurred a highlight or turning point in the Nation's history and the preservation and interpretation of the site will always have nation-wide appeal, they should receive Federal status. The Federal Government in its administration of such areas is in a better position to give a true perspective and sense of values than can the States. A few years ago, I was advised that the battlefield of San Jacinto in Texas was the only historical area in that State which the National Park Service at that time might be interested in acquiring, since this battle, which has been aptly described as the sixteenth decisive battle of the world, resulted later in our acquiring what is now Texas, the major part of New Mexico, southern Colorado and western Oklahoma. The State of Texas is now undertaking, at a cost of a million and a quarter dollars, to erect there a monumental shaft higher than the Washington Monument. But if you were to go to San Jacinto Battlefield today, you would find it difficult, if not impossible, to learn the story of what really happened there.

Other themes for possible historical development in the region include the "ghost towns" such as Tombstone, Arizona, and the old Trails. The famous Santa Fe Trail offers an interesting opportunity for preservation at one of the points where the deep wagon ruts are still clearly visible for miles across the plains, and within walking distance of the main highway. The landmarks, still standing, of the Chisholm Trail along which for 30 years the cowboys, over periods of weeks at a time, had to drive their tremendous herds of cattle all the way from south Texas and way points to the end of the railroad in Kansas, offers another possibility.

It is perfectly understandable that historic sites in the east have received fuller recognition than have those in the west. The west is closer to the day of the frontier than is the east and the frontier is never vitally concerned with the past—it has no past. It has only a future on which it concentrates its entire energy.

There are 110 historic sites in the region which we have been called upon for investigation and report. We need have no fear, however, that this will result in the Service being called upon to attempt acquisition of a flock of sites of intermediate importance. The Historic Sites Survey

offers a coherent, planned procedure for determining which sites are the most suitable.

I trust, then, that I have presented the case for Region III from a standpoint of proper land use. Future purposes of the National Park System must depend in no small measure upon a more universal knowledge of the country itself, and for what each part of it is most useful. Land-use planning is today affecting every field agency of the government. Planning throws the light on past mistakes and long range needs. The late Senator Morrow once said, "We hear a great deal about the cost of planning. Somebody should write a book on the cost of not planning." According to the National Resources Committee, over 50 per cent of highway travel today is tourist travel, and certainly this significant statement should result in some deep thought on the part of recreationists and planners.

Conservation in Region Four

FRANK A. KITTREDGE, Director, Region IV, San Francisco, Calif.

IN REGION IV are found national park areas of many types—highest mountains, deepest valleys, grand specimens of erosion, exhibitions of sedimentation, glaciers, deserts, wildlife preserves, primeval areas, historical monuments.

Types having intrinsic value, such as these, are eminently suitable for inclusion in the National Park System and require suitable conservation.

As stated by Secretary Ickes—"Conservation" is "prudent use." What *is* the wise use of the national park areas? What is the forecast of the National Park System in Region IV? Who can say?

However, I feel deeply on the matter of conservation of both natural resources and park ideals and am happy to present this forecast as my personal idea—touching, of course, only generally and along only a few lines.

Wise use of our western national parks was defined by Secretary Lane in his Magna Charta of 1918:

First, that the national parks must be maintained in absolutely unimpaired form for the use of future generations as well as those of our own time;

Second, that they are set apart for the use, observation, health and pleasure of the people;

Third, that the national interest must dictate all decisions affecting public or private enterprise in the parks.

What was good in 1918 is none too good for the *future* National Park System. The future will continue to *reaffirm* the Magna Charta of 1918, will *strengthen, revitalize* and *enforce* the rights and commands for conservation and use.

Our problems have multiplied since 1918 but our fundamental need for conservation has not lessened, indeed it has been greatly increased. There perhaps never was an occasion since Theodore Roosevelt and Stephen T. Mather when there was greater need for the establishment of conservation policies and ideals than now.

The Park Service came into being 20-odd years ago because the conservationists of the country were aroused and demanded a different kind of conservation for our best and most wonderful areas, a *conservation* which *would enjoy* and *inspire but not destroy.*

The system of the future will carry on these principles of conservation, else the reason for the very existence of the Park Service will be gone.

Just what the national park area of the future will comprise is dependent upon several features—just what may be considered the finest, not the one finest, of its kind (there are lots of them), the number of striking examples of areas telling the story of earth forces, of life, and of the progress of civilization. It will depend upon how faithfully future organizations care for and use these areas of intrinsic value, including primeval areas, entrusted to their care.

It will depend upon the dominance of the one idea—perpetual conservation for educational and inspirational use (human welfare) and a willingness to fight continuously for their protection.

The future status of the Park System depends on whether the future conservationists will discern the fundamental values in the parks; whether they will preserve our primeval areas; whether they will make them usable for educational and inspirational purposes by the youths and the adults of the country; whether they will not permit the most precious spots to be opened by roads and developed by villages.

The existing bits of primeval country remaining are the last of our heritage of the country as our forefathers found it. Region IV, in the very nature of things, has a large number of these remaining areas. The Park System of the future will conserve and use wisely its primeval areas, else a new generation of conservationists will rise up in their wrath and put them in hands which will conserve them.

The Park System will, through continued study and search, establish values of areas and objects, will define the natural features for which each park and each unit, large or small, is most valuable and shall establish means of preserving it for that use. It will be preserved for its fundamental use against whatever attacks—by cushion tourist, irrigationists, power, builders of fine structures, propagandists.

Park values will be crystallized into policies and procedure for us in character building.

Park conservationists of the future are going to view park values whether in or out of primeval areas, whether historic or scenic, with such a jealous eye and will safeguard with such an iron hand that the generations to come will be using our same heritage undiminished.

The National Park System of the future will continue to carry on the injunction that these areas are set aside for the use, observation, health and pleasure of the people.

Typical portions of the primeval areas of the future must be made accessible on foot to the boys and girls, to the men and the women, who shall safeguard these great primeval areas in the next decades.

The finest possible expenditure both in conservation of our youth and in conservation of our natural resources will be obtained when the Federal Government expends some hundreds of thousands of dollars in building moderate trails, low-cost shelters, and trailside lodges.

These facilities will permit groups of young folks, under auspices of organizations such as the Boy Scouts and the Girl Scouts, and families to go afoot between shelters, between places where low-cost subsistence may be had for those who are unable to meet the expense required to pack in their subsistence and shelter in case of storm. There seems no reason why a boy's two weeks' hike through the high Sierras or through Glacier National Park or Mount Olympus could not be made to cost about as little as he now spends for two weeks in a Y. M. C. A. camp.

So far as the future System is concerned, we may be hearing about the forgotten boy and the forgotten girl who are going to run the conservation activities of the country in the next generation. There is no better way of conserving natural resources than to spend a little money in the primeval areas of our country to make them walkable and livable to our youngsters.

The National Park System of the future will tend to be operated upon Nature's terms rather than upon the terms of the visitor. People will come into the national park areas, along routes which will encourage tuning of their mental attitude with the wilderness atmosphere.

It seems useless and destructive of essential values to build into virgin territory roads of so high a standard that the atmosphere of the country for which the visitors come, is lost. A determination of values is essential before roads are built. If the object is just to get from here to there, a 45-mile-per-hour road is correct.

If, however, we are traveling through country of national park scenic value then a road will be built which will blend with the contour of the country and will involve minimum destruction. Perpetuation of the local values and the park atmosphere is the essential—not the road.

If these values cannot be preserved in the presence of a road then the road will not be built—unless of course it is a road primarily to get from here to there.

This does not imply criticism of anyone—even of myself. It is a statement of consciousness of park values to be embodied in the building of park roads of the future.

Simplicity is the keynote of the Park System. Monumental buildings and structures will not be chosen. Unobtrusive embankments which

will revegetate, where practicable, will be selected instead of massive or monumental bridges.

Simple cabins in the woods are conducive to relaxation and the blending of one's mental attitude with Nature's. On the other hand, a grand hotel—whether in a city or in a national park—becomes like a morgue unless it is filled with excitement, music, amusements.

Simplicity in living surroundings in a park begets restfulness—harmony with surroundings.

The Magna Charta of 1918 says that the park shall be made accessible and habitable so that the natural attractions of the park may be enjoyed. It does not say anything about making the parks accessible so amusements may be enjoyed in a beautiful setting nor does it say that attractions shall be provided so the people will come and be kept amused.

Lack of many artificial amusements will in the future tend to eliminate many of our problems along with that type of person who goes to the national park for the same reasons that he goes to Coney Island.

Curtailment of artificial amusements may tend to solve the congestion problem which has so harassed certain park areas.

In new developments, the establishment of separated and single units of limited size which will be complete in themselves with cabins, mess accommodations, store, camp-fire, ranger service, etc., will tend to avoid much of the citified appearance and resort atmosphere that might otherwise develop. Even the citified actions may be tempered of people who would like to forget the city if camp surroundings were conducive.

Time will be taken by the Service to reflect upon the guiding principles of the Park Service, to analyze park values, to establish a goal of perfection—not that we can reach perfection but that its attainment may always be before us as a guide and ideal.

Many of our institutions have come from Europe—at least the trail has been blazed. The one contribution of its type given to the white man's world by America is the national park idea—the preserving of the supreme scientific and intrinsic values of the primeval.

It is that one conception and its fulfillment—our yardstick if you please—that has won the confidence of conservationists and the love of the people for the national parks.

There is a grand future in the National Park System in the preservation of our grandest and most beautiful natural areas; in the preservation of the most precious bits of primeval country; in holding and imparting the atmosphere of primeval wilderness; in the using of these gifts of nature, generation after generation, in physical, mental and inspirational upbuilding—Conservation and Use without destruction.

RECREATIONAL USE OF NATIONAL PARKS

Ideals

JOHN R. WHITE, Superintendent, Sequoia National Park, Calif.

IT IS an honor to be asked to speak before the American Planning and Civic Association. It is still more an honor to be asked to speak on "Ideals in the Recreational Use of the National Parks." But it is a responsibility, for which I feel inadequate, to define those recreational Ideals.

The Ideals of the Service as they affect the recreational use of the national parks and those policies which must enforce Ideals, have, during my nearly two decades in the Service, been laid down by several Secretaries of the United States Department of the Interior. They have in recent years been strengthened and applied to changing conditions by Secretary Ickes. During that time, also, Directors Mather, Albright, and Cammerer have interpreted those Ideals and policies. It is natural that I am hesitant to speak upon this subject.

There is also another reason for natural hesitation to speak on the subject of Ideals. It might be inferred that, like all superintendents, I am an idealist; but it might not be inferred that we are practical idealists. It is an unfortunate thing that words are often used without clear definition. There is much misunderstanding of the word "Ideals" and more perhaps of the word "idealist." In this discussion let us take the word "Ideals" to mean the perfect picture of the national parks and the retention of that perfect picture through policies of protection and development which will not injure it. Then, let us consider an "idealist" as one engaged in the preservation of that perfect picture; but also as one who has a sense of time and proportion, a feeling for men and women, with some understanding of national history and politics and economics as they must affect the national parks.

Above all, let us not put the idealists on one side and the realists on the other side, for a national park man must be a bit of both. But let him not compromise his ideals too far or he will be false to the men who have preceded him and to the natural wonders of which he is the immediate guardian.

There is much sneering at Ideals, sneering which may be indirect. When I hear it I like to remember two sayings by men, very different men, but both were men who loved the open air and the national parks. Theodore Roosevelt said: "There is nothing more practical in the long run than the preservation of beauty." Owen Wister said: "There are millions of men who eat three square meals a day and are as dead as doornails."

It would be idle of me to discuss here the broad, general Ideals of the national parks; or even to mention those Ideals which we have tried to live up to in Sequoia and Death Valley, unless a little time remains at

the end of this presentation. I feel that I should be concerned with the relations of Ideals to the practical aspects of a superintendent's work. Just let it be remembered that we are considering the preservation of the perfect picture of the national parks, that perfect picture which is chiefly affected by recreational use; and that use is, of course, inextricably bound up with all other park uses. Then, of course, I speak with special reference to that nucleus of the National Park System, the great scenic parks which bind the Nation together in an encircling chain, crisscrossed with links.

The important thing would seem to be that there is no confusion about Ideals and about their application through policies to the varying areas which make up the National Park System. Of next importance seems to be the interpretation of Ideals through policies which must be put into effect by the field officers of the Service.

Let us be clear on this: general policies may be written out in Washington; they may be interpreted and explained at other central administrative points; they may be spoken on platforms or around tables; or they may be sent to the remotest habitation over the air and even into the depths of the forest, the mountains and the deserts; but, finally, they must be put into effect, into practical effect as they influence men, places and events, by the men in the field and on the job. The man with his feet on the soil, rubbing up against his fellow men, meeting the rush of travel on the holiday, the rush of the river in flood, or the rush of wild or semi-wild animals at park visitors: that is the man, be he superintendent or supervisor or custodian or any other designation, who must give practical effect to policies. And as policies are rarely written which can cover every case, the man in the field boots and on the job must do as good a job of interpretation as he can.

Therefore, it is clear that the application of Ideals in recreation depends on policies which in turn must run through proper channels from the fountainhead in Washington to the faucets in the field. And all depends on the men who keep the channels open and the men who turn on the faucets.

With these preliminaries which have seemed necessary for a definition of the subject, Ideals in recreation, let us turn to a brief consideration of the question as it comes before us superintendents or others in the national parks.

Two years ago, at our last Washington Superintendents' Conference, there was presented a hastily prepared paper on "Atmosphere in the National Parks." In the brighter light of two years' thought and conversations on the subject, let us consider some of the problems which have come up in our western parks.

Today winter sports are all the rage. We can see the crest of the wave which is sweeping over the country. What shall we do with that wave in the national parks? Shall we ride the crest of the wave like the Hawaiian

surf-rider; or shall we plunge through the wave and emerge the other side, as the Hawaiian sometimes does; or shall we stand up against it and be tumbled over breathless and get our lungs full of water and perhaps of sand?

Of course the answer is, we must ride the crest, guiding the national boat along and keeping it as dry as possible.

In Sequoia National Park we have now had over ten years' gradually increasing winter use of the park for winter sports and we still feel as we did two years ago when we went on record as follows:

> Emphasis should be placed on opportunities for everyone to take part in free sports rather than on featured performances and competition.
>
> Skating rink, toboggan slide, and ski-runs should be as natural as possible and with little or no artificial construction. No charge should be made for their use. No attempt should be made to rival professional winter sports areas. Winter sports should be incidental to winter use of the park, not entirely dominate it.
>
> Any mechanical aid to winter sports such as a ski-elevator or a toboggan elevator is out of place. Improvement of facilities should be limited.
>
> In an attempt to excel and to build up operators' winter accommodations, there is a danger of commercializing winter sports and finally of injuring atmosphere and even scenery. If operators make considerable financial investment in winter sports facilities, equipment, buildings, and so forth, there is danger that winter sports will dominate the picture, be improperly commercialized, and make a hurly-burly of the park in winter.

It will undoubtedly be argued—as it so often is—that the parks belong to the people; that if they want upskis and sporting toboggan courses or ski-jumps they have a right to have them in the national parks as they have elsewhere in the private resorts, the state parks or the national forests. It would take too much time now to refute that argument, but I would like to sketch out at least one illustrative experience, and one deductive argument.

About fifteen years ago the country suddenly bloomed forth with miniature golf courses. The operator at Giant Forest at that time—a fine fellow and still a good friend of mine—insisted in no uncertain terms that unless he were permitted to put in a miniature golf course he could not compete with other resorts that were installing them. No other comment is necessary at this time, fifteen years later, than to quote the refrain of a song that was popular in my boyhood and is still popular. Referring to miniature golf courses we can say, "But where is Casey now?"

And to a perhaps lesser degree the same might be said of real golf courses, tennis courts, badminton courts and artificial swimming pools. At different times all have been advocated for Sequoia, but somehow or other we are getting along without them.

Now for the deductive argument. It seems to us that the national parks may be little worlds within a world; comparatively small areas

which may serve as laboratories for experiments in the education of the public out-of-doors. One experiments in a laboratory but is very careful not to create an explosion which may wreck the tools. And, carrying the analogy a little further, perhaps some distance further, there are experiments today throughout the world in new government structures and new economies. But in democracies certain safeguards exist against too hasty yielding to what appears to be the popular will. So in the national parks we must not hastily abandon our recreational ideals. The trees, the rocks—all of that beauty, they have been there a long time. We can afford to wait a little while before making our decisions.

In summer recreation, as in winter recreation, and in those recreational features which are common to all seasons, and in the installation of those utilities and adjuncts which have a bearing on recreation, it seems to us that it is wise to go slowly. Two years ago in that same paper which was so generously reproduced in part in the 1937 Annual of the American Planning and Civic Association, we considered the following matters as they affected the Ideals of recreation in the western national parks, with special reference to the Sequoia National Park:

Campfire entertainments and educational work
Park entrance hours and quiet camps
Radios and loudspeakers
Dances
Tennis courts and golf courses
Swimming pools
Bands and music
Electric lighting
Motion pictures
The relations of public operators to recreation
CCC camps

It was an incomplete list but fairly comprehensive. Some of the statements made two years ago need discussion and clearer definition. It has become more evident to us in Sequoia that while the recreational Ideals of the National Park System may be broadly defined, yet the applications of them in the various parks must at times differ because of local conditions. We feel that discussion here in this conference will be more helpful than any paper that might be read. But before giving way to that discussion I would like to touch in a small way on a large and almost a new recreational problem in the National Park System.

Only within the last few years have we faced the question, the perplexing question of Ideals in recreation as they affect the desert. Although we have long had desert or semi-desert areas among the southwestern monuments, and particularly in the Petrified Forest National Monument, it is only four years ago that we acquired the two million acres of Death Valley; and still more recently that we took over the large Joshua Tree area.

The desert, it may well be queried, what Ideals of recreation need be

applied in the desert? Surely those dry, sandy or gravel wastes and mountains, those painted canyons and glaring cliffs—they cannot well be harmed by any ordinary types of recreation?

I wish that I had twice the length of time afforded me for the whole subject, just to dwell on the various aspects of recreation in the desert. But it is only possible here to point out that many new questions arise; and that one great attraction of the desert, its silence, has been but little considered. We must give form to new Ideals in recreation for the so-called desert areas, which are only deserts to the uninitiated. They are to us who have learned to love them great spaces of distance and beauty and silence—above all, silence where men can think more clearly than in a noisy world.

In conclusion, I would like to dwell for a moment on the thought that has become impressed on all of us who serve for a little while the trees and the desert: that is, that the things of Nature remain and are the only permanent and enduring things in a world of disordered change; that the trees and the mountains and the desert have seen many civilizations rise to their peaks and crash to their falls; that they were unchanged except by natural processes until modern man a few moments ago in geologic time attacked them with his engines; that their beauty and their silence are more necessary than ever and may be the deciding factors in the existence of democracy, for man must get away from the insistences of democracy if he desires to think out clearly the processes by which democracy may be preserved . . . dwelling on these thoughts from time to time we can return refreshed and confident to the realities of life—to the roaring tunnels of city streets or the desks piled high with papers.

These are new days, with a world in one of its century cycles of change. But the parks are old, and age should balance youth. We like to think that under the inspiring influences of our parks we may work out together, all of us, some of the principles and policies that must obtain outside the parks and throughout the Nation if democracy is to survive.

And we like also to think that the millions of our fellow citizens who come for recreation to the national parks and other areas may sense the Ideals of the parks through a practical contact with the result of them, and may thus go back refreshed to their working life at home.

And as I quoted from a popular jingle earlier in this paper, permit me to end with four lines of real poetry which were written seventy years or so ago about Asia—and might well again be applied to the Far Eastern situation of today in China:

> The East bowed low before the blast
> In patient, deep disdain.
> She let the Legions thunder past
> Then plunged in thought again.

The Legions of the public come into the national parks. The Legions come and the Legions pass. The Legions of the future may not want what those of the present want. Our trees and our mountains and our desert, all that remains of our national beauty, will be there, let us hope, after we little men have gone. It is a pleasant, if sometimes a perplexing task, to hold up our Ideals of recreation in the national parks and do our share to preserve that beauty.

Present Uses

EDMUND B. ROGERS, Superintendent, Yellowstone National Park, Wyoming

ARE the national parks dedicated to two diverse concepts of land use? The establishing acts incorporate almost identical wording. Each area is "dedicated and set apart as a public park for the benefit and enjoyment of the people of the United States." The Yellowstone act reads as a "pleasuring ground for the benefit and enjoyment of the people." On the other hand, the acts specifically charge the administrative authority with the duty of providing the proper regulations for the preservation of the areas "and their retention in their natural condition."

There are some who believe that to fulfill the purpose set forth in the dedication, the areas should be open to the free, unrestricted use of the American public. Let man do as his fancy finds. But man is a destructive agency. His unrestrained presence is inconsistent with preservation. What he does not destroy, he modifies. Under such circumstances we would thus be faced with two incompatible concepts of land use, neither of which would have priority over the other. Neither would have right of way. Neither should step aside for the other. Each would be present at the sacrifice and toleration of the other.

It was not until after 17 national parks had been established that there was a restatement of basic national park policy. Yellowstone National Park had been in existence 44 years. Yosemite had had national park status 26 years. The Act of August 25, 1916, to establish the National Park Service sets forth the "fundamental purpose" of the National Park Service in these words: "to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." This statement clarifies the picture and places the emphasis on the preservation aspect. It gives preservation a certain priority over the recreational use by defining certain limitations on the latter. Under this mandate of Congress, if we are to fulfill the trust of preservation, some restriction on the type and extent of the recreational use of the parks must be imposed.

Thus those who are charged with the administration of the national

parks find themselves under way on a dangerous rock-bound course. The channel is narrow, beset with tide rips, cross currents, and uncharted reefs. It is defined only by forbidden shores, neither of which can be approached nor lost sight of. There can be no turning back. Reef the sails if you can, but the current sweeps on.

While we cannot divorce the two concepts, we are concerned at the moment with only one, which, for lack of a more appropriate term, we call "the recreational use" of the national parks. Recreation is a strong, vital word. It is defined by Webster as "Act of recreating; or state of being recreated; refreshment of the strength and spirits after toil." You will note that it is not the nature of the act that is recreation; it is the effect of the act that makes it recreation. Recreation is a by-product of some activity or state. An activity, physical, mental, or spiritual, may be recreational. It is not what is done; it is what is assimilated that makes an act recreation.

Approaching recreation in the broad sense, the field of the national parks is very limited. The parks cannot and should not attempt to provide recreational facilities of every type. Any form of recreation that is inconsistent with preservation is disqualified by law. Thus any forms which require modification of natural conditions or artificial structures are eliminated. The recreational activities of the national parks can be justified only by limiting them to those phases in which the parks are eminently qualified. This might be defined as those phases in which the esthetic values of nature contribute an essential or vital part. This would exclude the development of any facilities for recreation in which environment is a negligible factor in the enjoyment or benefits derived, that is, any form that is self-sufficient.

We cannot here go into details. We cannot weigh and classify each individual form of recreation. Of necessity we must deal in broad groups. Without question the scope of the national parks' use includes that group who gain recreation from passive association with nature. Persons of this group find recreation in the presence of nature without the necessity of actual contact with it or of physical activity. This group is characterized by one who says: "I will lift up mine eyes unto the hills, from whence cometh my help." He presents us with no problem. Make nature accessible to him and we fulfill our trust.

There is a larger group who find recreation in nature, but only through intimate contact with it. This group includes the hiker, the horseback rider, the mountain climber, the camper, who must have some physical activity to gain recreation. He must feel the spray and hear the thunder of the falls. He must reach the summit of the mountain. He must seek out and study the individual flower where it grows. He must feel the crowd of the forest. He must match his strength against the elements. For him are the trails and the campgrounds. To this group the national parks are appropriately available for winter sports. Prob-

ably no other use of the areas is more consistent with preservation than cross-country skiing or snowshoeing. No dynamite or shovel must precede to clear the trail. The ground cover is protected from damage with a blanket of snow. The spring sun obliterates the last evidence. However, winter sports activities which require extensive artificial structures, grading, clearings, must be disqualified from the national park field of recreation.

The uses described are beyond reproach. Under stress and pressure, less desirable popular forms of recreation have crept into certain parks; for example, tennis and golf. Both require artificial structures and golf by its nature requires space which cannot be reconciled with our preservation concept. These are games which involve high concentration. It is hard to conceive that the presence of the Grand Canyon, El Capitan, Mount Rainier, or the Yellowstone Falls would contribute anything to the game itself.

There is one phase of the recreational use of the national parks that must not be overlooked. The leasing of ground within the national parks for the purpose of public accommodations is specifically provided for by law. Certain general limitations have been placed by law around this authority. But just how much area can be consistently dedicated to this purpose? Each development involves necessary utilities which extend ever-growing arms into the wilderness. With the rapid increase in travel, must accommodations be provided for everyone who elects to arrive? Must we be expected to make provision for peak loads?

The Organic Act creating the National Park Service says that: "The service thus established shall *promote* and *regulate* the use of the Federal areas . . . by such means and measures as conform to the fundamental purpose of said parks."

That is an intelligible statement and means nothing more than that we should provide for the type of use that each area is best suited to give. Areas that are set apart primarily for their scenic attractions and outstanding natural wonders must be adequately provided with roads and accommodations to care for the people who come to see them. There would be no justifiable reason to construct such roads and accommodations in an area that is set up primarily to preserve its roadless and primitive character. Yet, both types of areas are now governed by the general policies of the Organic Act and, in those cases where a park is sufficiently large, both types of area are found, and each is conserved to render its particular type of use. Does that mean that all national parks must have roads and peak-load accommodations? I think the answer is plainly "no." There is no reason why extensive primitive areas should not be set apart as parks to be developed and used by trails only. Under such practices, certain areas, such as the lake region of northern Minnesota, could be adequately used by merely taking advantage of the natural waterways already provided, and by the con-

struction of such trails and rustic shelters as would be necessary for trail and canoe transportation.

On the other hand, parkways and historic sites are developed to meet the requirements of millions of visitors, and rightly so. Those who would insist that all park developments must be of one type have failed to recognize the different kinds of nationally important exhibits that the National Park System is set up to conserve. The only simple element in the mandates of the Organic Act is that the developments must be conducive to the enjoyment of the objects to be preserved, whether those objects be wilderness, scenery, geological phenomena, historic sites and buildings, or outstanding biological communities.

These are the different types of recreational developments—and you may call them inspirational or educational, or by any other name, if you so please—that we are now trying to provide. There is no question that mistakes have been made. Where they have been made, we hope to correct them. We believe that, in the main, our course is right and we submit it to you for your consideration and appraisal.

Park, Parkway and Recreational-Area Study

HARRY CURTIS, Regional Supervisor, Recreation Study, Region II, National Park Service, Omaha, Nebr.

THE National Park Service is the accredited Federal agency dealing solely in parks and recreation. The Park Service does have a duty and can fulfill a function by participating with the States in the development of a long-range plan, in master planning of individual areas to take care of established recreational needs, in assisting with the coördination of the recreational facilities and services provided by different agencies, public and private, and in keeping such long-range plan and master plans up to date, current, and alive, and in adding its support to the execution of the recommendation of these plans. It is believed that this should be the main and proper function of the National Park Service, in dealing with the forty-eight States in state recreation. To assure coördination of its own fine system of parks with those of other agencies, and most important, disseminating through its contacts throughout the country the best development in each of the other States, the Park Service may further the provision of adequate recreational facilities to meet the needs of the Nation.

With the exception of Iowa's twenty-five-year plan of conservation, California's Olmsted report and plan, the 1932 recommendations of the Illinois Board of Park Advisors, the unpublished plans of the Indiana Conservation Department, the New York State Plans, and perhaps a very few others in States with which I am not familiar, a broad, general recreation plan and policy for each of the States was entirely lacking.

The first state park CCC camps were located on the most outstanding recreation areas and others following were assigned according to the best judgment of the state park officials and the National Park Service state representatives.

It was, of course, impossible to expect the various States to have worked out in advance sufficient plans to utilize profitably the sudden and unexpected Federal funds for labor and material made available by the CCC in 1933 on adequately justified projects.

To many of the States it soon became apparent that in order to utilize to the fullest the available CCC labor and material funds, and most adequately to provide recreation facilities, much factual information was required on the needs of the people and the relative merits of existing and proposed areas. The assembling of a broad, general plan of recreation was soon to become a necessity and its continuation and improvements to keep pace with changing times, a continuing requirement.

It became equally apparent that such planning was essential in safeguarding Federal funds to insure their use for obtaining the best constructive achievements in the most used and usable locations.

In the type of development being undertaken in areas under construction, in the priority of occupying new areas for construction, and in concurring with the States in recommending acquisition of new areas, it obviously became necessary to determine the recreational requirements of the people through a carefully analyzed general recreation plan. Confronted with the financial responsibility of maintenance of facilities constructed through the CCC, state officials became increasingly anxious that such developments be placed where the need was the greatest and where popular support for their maintenance was at hand.

The aim of any well-conceived recreation plan then should be the provision of an adequate recreation plant at the least construction cost, and with the least maintenance requirements.

It was not until June 23, 1936, that the Park, Parkway and Recreation Study Act was approved by the President. This bill stated in part: "The Secretary of the Interior is authorized and directed to cause the National Park Service to make a comprehensive study other than on lands under the jurisdiction of the Department of Agriculture, of the public park, parkway and recreational area programs of the United States and of the several states and political subdivisions thereof, and of the lands throughout the United States which are or may be chiefly valuable as such areas. The said study shall be such as in the judgment of the Secretary will provide data helpful in developing a plan for coördinated and adequate public park, parkway and recreational area facilities for the people of the United States." The bill states further: "The Secretary is authorized to aid the several States and political subdivisions thereof, planning of such areas therein, and in coöperating with one another to accomplish these ends." The National Park Service is authorized to

assist the States and their political subdivisions in planning for their recreational needs, and directed to prepare an integrated national plan of recreation.

A little more than a year ago the Park Service issued a manual entitled "Park, Parkway and Recreational Area Study," setting forth the requirements for developing the national plan. At the same time a small staff of planners were set up in the Washington Office and in each of the four regional offices, while state supervisors were appointed to initiate field work.

It is clearly evident that any adequate national plan must be based on a series of well-conceived state plans, later to be properly integrated with each other into a unified national plan. It is true that a state recreation plan to be of the maximum value to the State in future acquisition, construction, development, maintenance, operation, and legislation, must be prepared by or have the benefit of the experience and ideas of the state park authorities and also the state planning authorities.

The state park agency, the organization to be aided by a state recreation plan, and which will benefit most from the correlation of state plans into a national picture, has been, in most States, the group most actively interested and has taken the lead in the state study. Coöperating with these park authorities are the various state planning boards, fact-finding agencies, whose information and ideas are indispensable to a proper study.

For the national recreation plan, the study manual sets out rather specifically the factual information required and the technique of developing the report. The requirements of the various state plans, however, have not been standardized and must vary in their context and approach to fit the various problems to be met in each case. Each of the forty-eight States has its own pressing and particular recreation problems—problems whose early solution means much to the recreation program within the State.

The publishing of such a state report by the park department or the State Planning Board, concurred in by the National Park Service and given proper dissemination throughout the States to organizations and individuals interested and influential in recreation could in most cases secure sufficient public support to obtain legislative concurrence in the required developments and plans. Each state park authority has continually in his mind his own particular problems. Each will be confronted with the problem of budget approval. Many will seek land acquisition and development funds. Some will require legislative action; others wish backing to appoint necessary technical and administrative personnel qualified to meet the problems confronting the state organization.

To delay for a millenium the perfect plan, would be unpardonable. As park planners we must guard against being carried away by the

splendor of a theoretical approach to a mechanically complete plan at the expense of letting opportunities for immediate improvements fall by the wayside.

Throughout the country, park authorities and planning boards are laboring with the coöperation of the National Park Service to complete and publish state recreation reports analyzing the immediate problems and working out recommendations for the betterment of the state's services in the recreation field.

From the Middle West, a state report for Illinois, for example, has been completed by the Department of Public Works and Buildings with the coöperation of the State Planning Board, the Chicago Regional Planning Association and with the full-time consultant service and assistance of a State Supervisor of the National Park Service. This report, upon concurrence by the National Park Service in its context, will be returned to Illinois and be published by the State Planning Board and Department of Public Works and Buildings. Chiefly the Illinois plan outlines a land acquisition program. A carefully worked out and detailed policy section recommends planning and development standards for parks in the Illinois system. A proper classification of present holdings was considered important and was adopted in the plan. The present technical organization and maintenance and operation funds seem adequate. However, the dividing of the State into districts was recommended. The qualifications of custodians and maintenance personnel were recommended to be raised.

The first published state recreation reports will not cover all of the points necessary in the preparation of the national plan. They will, however, have served their purpose in recommending a solution of the most immediate and pressing problems of the States. Regional studies such as metropolitan Chicago and its environs may be started from the original reports. The state and the Park Service field personnel may then assemble the necessary additional information to prepare the first national plan.

The various States and the Park Service, in participating in the preparation of state reports, definitely are furthering the ends of assuring proper recreational facilities. These agencies, by taking the lead in long-range planning and in planning the proper solution of the recreation problem in the States, has begun a task that is more important than any construction projects which may have been, or may be, undertaken by the Federal Government in state parks or metropolitan recreational areas. It is certainly true that such planning will make it easier to obtain from a legislature, funds for land acquisition, for development, and for maintenance of these same developments.

The Federal Government has no desire to, and is not taking over, state recreation but it may be very helpful in assisting the States to obtain proper maintenance and operation funds and personnel.

The CCC bill passed by the last Congress extending the services of the corps for three more years definitely placed the allocation of new camps on the basis of the State's ability to operate and maintain developed facilities. Certainly from the standpoint of the government, the assurance of proper protection and use of facilities built with CCC labor and material funds, is a reasonable request. It is equally true that assurance of proper operation and maintenance is an asset to the state park organization just as inadequate maintenance and operation would reflect adversely on the organization.

In summation, then, the Park Service has these two functions within the States: (1) Participating in long-range planning, in master planning and in guiding the provision of proper legislation, financing and personnel for the operation of recreational facilities, and (2) the responsibility of proper allocation and of expediting the work of CCC camps in accordance with the developed state and national plans where proper administration and operation are assured.

Relation of Operators to Recreation

DON TRESIDDER, President, Yosemite Park and Curry Company, Yosemite National Park, Calif.

WITH the coming of inexpensive cars, higher wages, better roads, and more leisure, the resultant increase in travel very suddenly dropped into the lap of the National Park Service the problem of handling traffic that was growing rapidly from year to year. The work of preparing for the next year's increase absorbed most of the energy and planning power of the people responsible for handling this great influx of travel. In recent years, growing apprehension has been felt lest we lose sight of the fact that these parks were set aside to be preserved in their original scenic integrity and atmosphere; lest, in the rush of handling people, we forget the primary obligation of the Park Service.

In recent years there has been apprehension, much justified, that perhaps in some respects the job was not quite what it should be. There has been criticism, justified for the most part, written and spoken, intended by you and people of your group to aid responsible administrators in directing their energies along lines that would get the result all of us agree is the one we should have. No one likes criticism, even if it is justified, whether it is an agency or a bureau or an individual or a company. Particularly is criticism resented if it is unjustified. I appear before you with the idea that along with a lot of justified criticism, there is also a great deal of careless, poorly considered criticism of what we are attempting to do. I refer to it not from the point of view of resentment, but with the idea that one of the best defenses for our National Park System is active, intelligent, well-directed criticism; and to the

extent that that criticism fails to lay a background of fact, it fails to produce a good result and turn people's minds from what they are attempting to do properly to meet issues that should not have been issues.

I speak for a modest business in a park that is commonly felt in some quarters to be one of the worst examples of overdevelopment and overcommercialization that we have in the Park System. In talking to you I am not apologizing for what has happened, nor am I attempting to divert your attention from what is happening to something else. I am speaking, I hope, in a presentation of a picture of park operation that will enable you more accurately to see how the job is being done. I am speaking as a businessman who is trying to operate a business in a park, to make a profit and meet the primary responsibility that he accepted when he took his contract—a responsibility which was laid down originally by Secretary of the Interior Lane, who said that "because of the nature of national park areas," it followed that the public interest must at all times dictate the decisions affecting private interests. It has almost become a matter of social distinction in some places in the country to say that Yosemite Valley is ruined and that it has been overcommercialized to the extent that people visiting there cannot get their measure of enjoyment. Secretary Lane realized that the system of more or less scattered operations under annual revocable permits would have to be discontinued in favor of operations that would permit the Government to look to one concern and say, "We want these facilities in these places to render these services, in order that the visiting public may be properly cared for, and only such facilities be built and placed on park property as are needed in the interest of adequate service." With the announcement of the policy, he laid down these considerations which have guided the development since: First, that the area should be unimpaired for all time, and he emphasized in every paragraph of his original declaration and instructions to his officers that that was to be the measuring stick of what would happen to a park; not recreation,—the second point—which was benefit and use of the area, nor the third point, which was the providing of those facilities for the visiting people that they reasonably required in their recreation and their sightseeing and tourist activities in a park. Starting with that, the National Park Service was built up.

The going of Mr. Mather and Mr. Albright and many of the other old guards is given by critics as an indication that the new group, coming from other fields, men who are not so-called "old-line employees" of the Park Service, have not got the picture, that they are not capable of absorbing the interest and the policy declaration of the people for whom they are working. Beyond everything else there is a worry that the operator may, in his desire to make more money, which is a natural urge we all recognize, press so hard and become so influential that he

will warp the judgment of the people responsible for park administration in ways that, in the end, will be damaging to the parks.

The Yosemite, in a recent article, was described as an area in the valley that was no longer a wilderness area. That, of course, is true, because the Yosemite Valley changed its atmosphere when the first tourist party entered it in 1851. It changed even more when the first roads were built in 1874. Another big change came in 1907 with the coming of the railroad, and just in proportion to the degree of reasonable accessibility, either through ease of traffic or inexpensive travel, so did it open up the park to an ever-widening group of people. Originally it required so much time and cost so much money to visit a park that the park patronage was naturally selective. Only those people with money and leisure could visit a park; and it followed, too, that these people had had good educational opportunities generally, and a fine feeling for the out-of-doors. But overnight, into the Yosemite, five hours from San Francisco with a million and a half people, eight hours from Los Angeles with approximately three million people, located in California which has more year-round roads and more automobiles than any State in the Union, came millions of people who had never been on a park expedition before in their lives and who had no conception of what a park was supposed to be. Right there began the trend that concerns all of you so deeply, and I may say, concerns us so deeply. Because, instead of dealing with an essentially educated outdoor group, we were then dealing with the caprices, the desires, the wishes of a whole gamut of civilization from the slums up.

I will illustrate. Most of the people who enter the park have had no previous experience and do not realize that they are part of several hundred thousand. A few years ago in the Yosemite Valley, while looking through the window of the Ahwahnee Hotel on to the wildflower gardens, we saw, on a crowded holiday in which there happened to be nearly 27,000 people in that seven-by-one-mile area in two days, a car containing a man, a wife, and three children calmly drive out onto the wildflower garden and unpack their tent for camping. The operator headed for them with wrath in his eye, only seeing that picture as it looked from the delightfully restrained atmosphere of the Ahwahnee Hotel. Before he could say what he had in his mind, the woman let the story out that it was their first car, their first vacation, their first visit to a park from the Mission Street area of San Francisco. They had pictured that park as green grass, a lovely river, and plenty of room to camp. It happened to be the only time they were going to get away that particular year, being Memorial Day. The man was not one of those people with two weeks' or five days' vacation, but had just that week-end holiday. When they arrived at the park they found that 15,000 others already were in the campground where perhaps four or five thousand should be and they did not find the grass and the lovely river

they expected; but near the Ahwahnee Hotel, there was the answer to their idea of what they had planned for and saved for for years. It took nearly three years to eradicate that little track that they left, multiplied by 15,000 that holiday, and yet they never meant to do any damage, but simply to enjoy the park.

Another incident is this. During the last few days someone asked whether we could remove every bit of artificial amusement and entertainment from the Yosemite in such a manner that only those people who wanted to get the feeling of the out-of-doors and solitude and camping would come. Could we not eliminate all those fellows with radios and all those who come to dance? Sometimes an operator or a Government man wonders whether *anybody* should be in a park or not because of the ever-increasing problems that arise out of the handling of one person multiplied by five hundred thousand. Last summer on the Fourth of July, which happened to be Sunday, three boys who had come into the Yosemite on motorcycles, first trip, were in one of the washrooms of a popular camp and I overheard this conversation: One of the men said, "Do they dance in this joint?" and the second chap said, "Sho dey dances in this joint." He said, "Do they dance every night?" The second said "Sho dey dance every night." Finally, the fellow said, "Do they dance on Sunday night?" I said, "No, on Sunday night they don't dance." He said, "What do they expect us to do in this joint? Look at the scenery?"

Whether we like it or not, we have to deal with every kind of person, from these boys up to a person of such discrimination and feeling for the place that he cannot enjoy it if anybody is with him. There are those who feel that if one person climbs a mountain and gets there through his own effort, that is better than ten thousand climbing it by car. We are not going to discuss that, but as a place is made available by car, certain problems thereafter have to be dealt with that are not peculiar to the money-making desires of an operator or to the lack of definition of policy of the Park Service. They arise out of differences in the people themselves.

In this same article to which I am alluding there was a statement about the Tuolumne Meadows, and the fact that a high-speed road was being put through this place for no reason at all and that the atmosphere was hopelessly lost. If it ever was desirable to preserve the Tuolumne Meadows unimpaired and as a wilderness area, then not even a trail should have gone in there. If a trail already was there, then certainly no wagon road should have gone in, because, even in my lifetime I can recall the unforgettable experience of camping in the Tuolumne Meadows where there was no road. When this new highway was proposed two years ago, people said, "Well, we have the present road; why have another?" The new automobiles can climb faster, steeper, better, than the old automobiles. The old automobile could not go up a grade so

fast that you did not have time to protect yourself coming down in the opposite direction. But now, automobiles are running around on a road that is 9 feet wide and, in several places, so narrow that cars cannot pass for miles on a 27 per cent grade, and yet all these drivers want to make the top in high. It became a question, either of closing that road or building a road on which people could travel in comparative comfort and safety. There was no excuse for putting a road through that would be so difficult that people could not travel safely on it.

Better and better roads, even before this new one, brought more and more campers, and it became apparent that some system must be installed. It became apparent that campgrounds must have sanitary facilities. A whole new sewer system at 8,500 feet altitude, right through the middle of the Sierra Nevada Mountains, was needed. The restriction of camping to the smallest possible spaces made it possible to preserve the wider areas. Then came a thousand automobiles, bringing five thousand people, and this summer sixty thousand people. Then what happened? A gasoline station was needed. It would not be placed off in the woods. It was needed at the nearest accessible point, or otherwise a staff would be required to show motorists where to find it. We have no hope of ever making money from a gasoline station there, but we had to put one in. We have no hope of ever making money out of roadside housekeeping camps. We have them. We have no hope of making money out of grocery stores at these camps, because they cannot open until the first of July and have to close about the first of September. Two months! It is hopeless from the start.

So anything we do is in the nature of carrying out a primary responsibility to the Park Service to give such facilities as the public requires. This summer there were as many as two and three thousand campers at night in the Tuolumne Meadows, many more than entered the Yosemite Valley in an entire month in 1915!

Next, the article which I have cited said that people, when they come to a park, should be allowed to have only simple pleasures, that we should give them nothing else. I want to point out that the more widespread the patronage is, the more different kinds of people there are, the more complex becomes the problem of what to offer.

Many years ago, when Superintendent Thomson was still alive, we decided in Yosemite Valley that we would stop dancing in the upper Valley, with the idea that all the people in the campgrounds could take a walk after dinner. We would stop the campfire entertainment with the thought that we wanted to keep the feeling and spirit of the out-of-doors sincerely. But we found that that was all right for one group who knew what to do and enjoyed taking a walk and were not afraid to be alone; but we found a great group of people that heretofore had not been recognized, who actually did not know how to take a walk by themselves in the evening or sit around their own campfires. Drinking, spooning

under the trees, wandering out in dark places, gambling, grew up to a great extent. The Government itself—not the operator with his idea of making money out of everything—reversed its decision, with the thought of giving park patrons a couple of hours of something to do, and also providing entertainment for a thousand young people working for the operator from the first of May until well into September. These employees wanted something to do and so, on the request of the superintendent, the experiments having been given a good trial, we opened again a dancing pavilion, not with the thought that this was peculiarly fitted to be a park activity, but with the realization that in the Yosemite Valley, with a changing population of 8,000 or 10,000 people at a time, problems of what they are going to do with their time arise immediately. I emphasize it with the thought, not to defend the position, but to get clearly in your minds that that situation exists and is to be reckoned with in any plan of park development or control.

One illustration of that: Some years ago members of this very organization, and some of them my closest personal friends, discussed the problem with me. They said: "Yosemite Valley is no longer a primitive area. We have got to turn our attention to real primitive areas in this park and develop some facilities where people can go who do not want to be mixed up in these great crowds." We conceived the idea of little camps ten miles apart on trails, no roads. We were going to serve a meal, just a "pot-o'-mulligan." We were not even going to give them blankets or floors in their tents, nor were we going to give them linen. They were going to be permitted to take a seven-day walk around the park circuit on the theory that they could do what then only the rich could by going out with a pack train which costs fifteen to twenty dollars a day per person. So the six camps were opened up ten miles apart. No running water, old earth toilets, and just a tent with a dirt floor, a cot and a mattress. The hikers were supposed to bring their own towels, linen, sleeping bag, or whatnot. The thought was that teachers, people of small means, Boy Scouts, and others would use these camps and they never would be permitted to be elaborated. But what happened to them? First, running water. No, the very people who had been in on the conception of these camps, when they got into camp, did not like the idea of going down to the river to bathe. They wanted floors in the tents. Then they needed to have linen on the beds. Then the physical exertion of carrying their blankets or sleeping bags was so great that they asked why we did not provide bedding. At first, we were offering no butter. Nothing like that. No fresh eggs. But the children wanted to go. Parents could not bring their children without milk and butter and eggs and when that camp got through we were offering just about the same type of service as you would get in any place in a city, maid service, running water, flushing toilets. Not amusements, not dances, because the camps only have a capacity of 50 people. We resisted and resisted.

This has all been going on for fifteen years. But we wound up with shower baths and the whole completed story, linen, fresh towels, and all.

I want to tell one more thing about the Yosemite Valley. About two years ago a writer with the thought of helping the picture, not hurting it, came into the park to look over the situation. He wrote a series on national parks for a magazine. He discussed the mistake of the deluxe hotel in Yosemite. He discussed the fact that a swimming pool should not be in the Valley. He went on to comment on the dance pavilion and a number of other things. He stayed in that park about two weeks. He lived at the Ahwahnee. He had room service most of the mornings. His family went swimming every day. They all enjoyed the dance at night. I do not mean that he was not sincere; I merely mean that you have one attitude toward a park if you only stay overnight, are tired as you can be and expect to go on some place else next day. But suppose you are going to stay two weeks. Then you want the amenities. I hardly ever meet a man who does not want to do something other than walk along the stream or hunt for solitude or enjoy just the simpler measure of the mountains if he stays any length of time. And so in this latest story of the over-commercialization of the Yosemite, it was pointed out that camping in the upper Valley was a matter of psychology, that people came to the upper Valley because of the fact that Camp Curry was there with the dance hall, liquor store, cafeteria and soda fountain. How absurd! The campgrounds in the lower Valley were there. The people came to the upper Valley because the highest concentration of scenic value in the whole Yosemite Valley is there—the most charming river banks, the finest views, the most beautiful ground-cover, the heaviest pine-needle fall. When Camp Curry was started, we did not look around and say, "We'll take this particular place" and then by our means of infiltration and promotion of business draw around us ten thousand campers. No. The campers looked for the most attractive area, and said, "Here is the place, the nearest to the trails, the nicest country," and established their camp.

The thought of discontinuing facilities in the upper Valley was suggested in this article. Parenthetically, I might add that there is no liquor store. I do not know where that conception came from because there never has been one and the operator would resign rather than let beer be sold on the place. The writer of the article wanted to discontinue those services when the cafeteria is the sole means of serving meals to those campers who do not want to cook their own meals. There we have a cafeteria serving 700 dinners in the busiest season and a dining-room that is serving nearly 1,800 more, not because we want to be as big as we can, but because that many people want to eat.

What does that lead to? It leads to this, as I see it. The National Park Service is not wavering and making mistakes due to a lack of fundamental policies that are all written and announced. It is not

deliberately putting twice the number of people in an area that can comfortably live there. It is battling with all its might to do just the contrary. The Park Service is organized as it never was before to protect the interests of everybody, to give more intelligent study to every problem. Then, what is the difficulty? It gets down to the fact, first, that if we are going to control development in parks and if there are to be any wilderness areas, the answer is not to begin at the tail and work backwards, but to prevent improvements from starting. If you do not want an area to be developed, do not let it start, even with a trail. The change in the atmosphere of an area depends on the number of people going in, and at the present time, if an area is under development, the yardstick, as I know it, is this: What determines the number of people that ought to be in a given area under existing policies? First, is the number of people coming in jeopardizing the scenic integrity? If so, that is too many people. Secondly, if there are so many different kinds of things with so many different types of amusements and recreation that the atmosphere is changed, not the mountains, but the very feeling of the place, then activities should be limited. The final yardstick can be called a mandate of pleasure to the extent that the Yosemite Valley can give man days of satisfaction in this area, or pleasure and enjoyment in that area, to the extent that those man days add up to more benefit to the public in true terms of enjoyment than the disadvantages of having that many people in there, up to the point that those two things meet. The time comes, as it has, when the man-day enjoyment is dropping and the number of people increasing. That is true in Yosemite. Something must be done about it. When the point is reached where the man-day pleasures go down, you do what a business does—you turn around and retrench. We must make a change that will bring fewer people in there at one time. One way is by developing other areas not now developed and not intensively scenic—areas in the park comparable to, let us say, a national forest. And there are thousands of such acres in the park. Not every acre of the 1,194 square miles is an acre of Yosemite-Valley standard. There are unlimited areas for development outside the park. The next step is to determine the number of people that can be in any given place comfortably, as was suggested, and beyond that to work out a mechanism to see that not more than that number of people get in. Finally, we can develop certain areas at seasons when the greatest number of people are not there—winter, fall, and spring.

In summing up, I want to emphasize that while we recognize the problem and try to be patient under real criticism, we hope you will comprehend the fundamental conception of the difficulties with which we are confronted and direct your criticism toward constructive moves that will lead us into ways of solution which will not involve dissolution of one class for the benefit of another.

Development of National Parks for Conservation

THOMAS C. VINT, Chief of Planning, National Park Service

THE founding of Yellowstone Park in 1872 marked the first tangible change in our national attitude toward our national land policy which, since the days of the pilgrim fathers, had been one of conquering the wilderness. That area was set aside to be preserved for its own value. Since then the conservation movement has moved along considerably and accomplished many fine things. Of these the movement to protect the wilderness solely for its own values, as expressed in the proposals to set aside wilderness areas, is perhaps the most extreme of the conservation viewpoints that have developed.

The growth of a protective attitude toward wilderness values in this country, particularly in the last decade, is an important asset to our national parks. It gives strong support to a restraining hand in the planning and authorization of development programs, but in its present status, it is more or less in the crusade period. Its enthusiasts are carrying the banner to new frontiers. While I agree with the crusade for the protection of wilderness, I am inclined to feel that in the current enthusiasm the expression wilderness area has been subject to much abuse and there may be some confusion as to what it means.

Webster defines wilderness as "a tract of land, or a region, whether a forest of a wide barren plain, uncultivated and uninhabited by human beings; a wild; waste; hence, a pathless waste of any kind."

This definition implies an area of considerable size, permits no cultivation, no habitation by human beings. The phrase a "pathless waste" implies no trails or roads. These terms are rather clear and extreme. While the wilderness quality can be considered as one of the values of national park areas, to do no more than to establish them as wilderness areas does not solve the national park problem.

If we could accept Webster's definition of wilderness without qualification and apply it as a single development policy to our national parks, our problem would be simple. The development plan could be limited to the construction of an effective barrier around the boundary. The administration would not need to go beyond an adequate control to prevent trespass.

The National Park Service could fulfill its charge, that of protection and preservation, to the ultimate. However, our national park law includes the words "for the benefit and enjoyment of the people." These words mean a direct clash with those of protection and preservation. It is the finding of the point of compromise between these two that makes the daily work of the National Park Service. Every move is a decision between preservation and protection on one hand, and the

benefit and enjoyment of the people on the other. Benefit and enjoyment are words of wide latitude. The phrase "the people," particularly in a democracy, has a broad meaning and versatile uses. Once you step into the realm of employing a tract of land for human use and enjoyment, you enter the field of landscape architecture.

Let us consider the problem of a plan for a new national park. Let us take a wilderness area—an untouched natural area containing some superlative natural values and outstanding natural features—and designate it a national park. It contains the ultimate in natural landscapes. Man cannot duplicate nor can he build better. In the sense of landscapes the landscape work is done. No development work is necessary. The landscape architect might agree with the wilderness enthusiast to build a barrier around the boundary and patrol it to prevent trespass. But what about "for the benefit and enjoyment of the people"?

The landscape architect, if he is practical, asks two questions: How many people are you going to admit? What are you going to let them do? Answer these and he can work out a development plan for the area. At what point will you trespass on the wilderness or intrude on the perfect natural landscapes?

Homo Sapiens out of all the animal kingdom is a creature that must be doing something about his surroundings. He disturbs the natural more than any other animal to obtain his daily needs. Carry him through the various stages of civilization and he finds he must set aside a little patch of the natural and protect it in order to have any at all.

Assume that we will admit only one or two persons and require them to travel afoot on their own resources. The area is still pathless, but for how long? In entering the pathless wilderness, a man, by nature, will blaze or mark his trails. Let him repeat or let another follow and they will, by nature, follow the blazed trail or even a footprint of the first man through. Increase the number of visitors and before long there is an established path. Increase that number again several fold or a hundredfold and the damage under foot increases and spreads.

At some point it is worthwhile, as a means of preservation of the terrain, to build a path. When the traffic increases, the path must be built stronger to resist the pressure. This theme can be developed, introducing the saddle horse and the horse and wagon and finally to where visitors are admitted by automobile. Likewise, the path for the automobiles will develop through various stages of improvement.

How many people are you going to admit, and what will you permit them to do while they are in the area? Let us take stock of our present-day conditions. As the parks are now administered, there is no restriction as to their mode of travel. However, there are restrictions as to what activities may be pursued within the park boundaries. Non-conforming activities are discouraged. No provision is made for summer homes. Golf courses and other recreational activities requiring constructed

facilities are discouraged. The recreational activities are more or less restricted to the sightseer, motorist, hiker and the rider. Fishing is encouraged, while hunting is discouraged and prohibited. Camping is restricted to established centers. We are apparently following the proper course toward answering the question of what we are going to permit them to do while they are in the park.

Our opportunity for experiment in the future lies in how we might answer the question: How many people are you going to admit?

The peak load in the travel season is a most serious question. An analysis will show that peak loads cover but eight or ten, and possibly in a few cases, thirty days, out of the entire year. If we build to meet it or build half way to meet it, we shall have a large volume of developed facilities lying idle during most of the season. This unnecessary idleness also affects hotel rates and maintenance costs. Some might think the peak-load problem applies only to the overnight facilities. It applies also to the circulation system of roads and trails and parking areas. Some restriction as to the number of people who may be in a park at any one time is the most obvious way in which we might influence the use and development of our national parks. It would offer more toward the preservation of the natural and wilderness values than any other move that could be made.

The peak load should be eliminated and development made on a level slightly above the average conditions throughout the year. Such a move would eliminate unnecessary development, prevent overcrowding of facilities, make the stay of a visitor much more pleasant and would inconvenience the general public but a very small amount. The number of people affected in the total number of visitors to the park in any one season would be relatively small. I believe that there is no question but that some trials in this direction should be attempted.

Several years ago when we first developed the Master Plan, the subject that received the most attention was that of the wilderness area. We included a map in the Master Plans of several of the larger parks to outline which were to be designated as wilderness areas and set aside for that purpose. Our first difficulty was with the definition of wilderness areas. We found that some of our authorities would not approve an area as a wilderness area, because it contained a shelter cabin. We found practically no areas within national parks that would qualify under the Webster definition, as most of those proposed had at least one trail. In the long run, I feel that we shall have to give up the idea, as it was first proposed, and rather than approach the problem from the angle of setting aside wilderness areas within the national parks, we must approach it from the other direction—that is, we must restrict the limits of developed areas and apply the protection that would be given to the wilderness area to *all* of the area within the boundaries of the park that is not a developed area.

Wilderness Aspects of National Parks

JESSE L. NUSBAUM, Superintendent, Mesa Verde National Park, Colorado

THE concept and purpose of national parks, from the standpoint of recreation, was epitomized in the report of the Recreation Committee to the National Resources Board in the following language:

> National parks are areas of primeval nature, of superlative scenic quality, set aside and conserved unimpaired, for the benefit and enjoyment of the people. Their development should be conducive to the realization of their recreational and scientific values, arising out of their natural characteristics, and should be consistent with these inherent qualities.

Proper use of national parks has always been interpreted to mean that parks should become reasonably and restrictively accessible—that shelter, food, safety, and sanitary accommodations be available to the public. Formulated high ideals of the National Park Service, for intelligent, protective preservation and utilization of the generous gifts of nature embodied in national parks, originally were patterned to the needs of a very limited and slow-moving traffic, largely horse and foot.

None could conceive of the problems, later to be presented to the nation, and more significantly to national parks, by the spread, speed, and volume of automobile traffic. Motoring demands of park visitors, and benefiting outside agencies, so threatened protective and preservation ideals of the Service as to promote immediate field studies and survey of unimpaired wilderness resources, and the establishment of wilderness areas into which no visiting motorist may proceed with his car.

The natural resources of national parks were studied, inventoried, and classified by areas in four primary groupings—the primitive, the modified, the developed, and the scientific. The scope of this paper is restricted primarily to the aspect of wilderness and to the primitive and scientific classes.

Early Dutch and English immigrants to America commonly referred to unexplored and unoccupied adjacent terrain, whether woodland or plain, as "the wilderness"—from the Middle English word "wildernesse," probably derived in turn from the Anglo-Saxon "wildor"—a wild beast —rather than the Dutch "wildernis." "Wilderness" survived historically as the place-name of the wooded area of northeast Virginia, scene of the indecisive battles of May 6 and 7, 1864, between the armies of Grant and Lee.

Progressively, as American colonial frontiers were pushed west from the Atlantic seaboard, the wilderness comprised the area westward of the fall-line of the Atlantic Coast, westward of the Alleghanies, of the Ohio, of the Mississippi, of the Missouri, and of the Rockies—with the final recession to the Pacific accelerated by the discovery of gold in the Sierra of California.

Possessed by right of discovery and used by the Indian from the time of ending of the Recent Ice Age, some hundred or more centuries ago, this vast, trackless, transcontinental waste of woodland, plain, mountain and desert terrain, teeming with native wildlife, constituted unknown wilderness—a *terra incognita*—to first white explorers. Fur traders blazed the way into the Indian domain, and opened the traces to advancing settlement.

Through more than two and one-half centuries, to the 1870 heyday of unrestricted free utilization of the public domain and its abundant resources, the American people diligently and relentlessly engaged in winning, or shall we say impairing or destroying, a transcontinental wilderness, and depleting the wildlife, actually terminating certain species. The natural elements of their surroundings, which seem to have been accepted at that time without appreciation, now show themselves possessed of tremendous values, as we strive to perpetuate unimpaired, the last vestigial islands of true American wilderness, and to solve the problems left in the wake of wilderness recession.

Reverting again to the dictionary, "wilderness" is defined as the quality or state of being wild. A "wild" is an uncultivated, uninhabited tract or region, as a forest or desert, or a trackless waste. In this connection I like to associate the word "wilder," the poetical verb transitive, meaning to lead astray. "Aspect," on the other hand, is the appearance to the eye or mind—the look, or view—from a position facing, fronting, or regarding a particular direction.

If these definitions are sound, then the aspect of wilderness may be restricted to the appearance to the eye or mind, from the viewer's position, of trackless wastes of forest, desert, mountain or plain, unmodified and uninhabited by man. But man is a product of wilderness.

Of all the creatures of Nature, man remains the only member that had the wits to implement his hand to cope with wilderness conditions. His progress towards civilization dates from the remote times when perchance in a moment of extremity, he picked up a stone, stick, or club to better defend himself, or to gain something beyond the range of his normal reach. Painfully shaping stone or wood to better fit his hand and purpose, he invented the basic instruments to dominate and deplete wilderness conditions of living. From these primitive beginnings and purposes, by substitution of metals, refinement of design, and application of power, we have progressively perfected their damaging character. Each oncoming generation expands and refines the instruments of potential wilderness destruction. It, therefore, becomes increasingly imperative that we aggressively strengthen the safeguards to wilderness preservation.

From the period of Late Pleistocene time, man has been associated with American wilderness, as one of the biotic entities which by reason of increase in number, or rate of movement, and practical domination

of other factors, now constitutes the greatest threat to wilderness value impairment. We cannot expel human kind from publicly owned primitive wilderness areas as Adam and Eve were expelled from their Garden of Eden, but we can prescribe primitive modes of travel and use with the hope that these hampering inconveniences of wilderness living will definitely restrict the extent of further impairment.

"Impairment" again is a relative or comparative term. Where in the Nation may we look today for a wilderness that has not been impaired by man? The scars of impairment may have been healed and largely effaced by a provident nature, but natural conditions and balances were disturbed.

During the past year, a group of competent scientists, engaged in the study of comparative differences in small faunal types of the north and of the south rims of Grand Canyon National Park, reached the conclusion that variations could best be explained by investigation of comparable types of a detached geologic island, so rugged in character and difficult of access from remote times, as to insure pure types, unmodified by mainland types or the influence of man. Shiva Temple was selected as conforming most exactly to the predetermined specifications. Among first findings on the Mesa top were the telltale artifacts of our wilderness predecessor, the prehistoric Amerind.

The aspect of wilderness is always a comparative quality to the individual which he interprets and evaluates in terms of his experience, appreciation and response. Some may complacently realize great spiritual stimulation and refreshment from modest, restrictive contacts with Nature. Others, to achieve like ends, may require extensive and extended contact with Nature in areas of great size and to be reached and enjoyed only through the expenditure of great physical effort.

The sense of wilderness may be comparatively realized throughout the major portion of most national parks by venturing modestly outward by primitive means from access highways and developed areas, but the sense of its full realization may not be achieved until one has trekked beyond the sound of the motor horn, the sight of the modifications of man, and entered into harmonious relation with Nature.

Nowhere else in the United States do so many varied opportunities for the sheer enjoyment of these unspoiled beauty-spots present themselves as in the national parks. Mirror Plateau of Yellowstone, a primitive wilderness of more than 300 square miles, situated north of Yellowstone Lake and east of Yellowstone River, is characterized by great expanses of dense lodgepole pine forest, interspersed with luxuriant open meadows.

The wilderness charm of this extensive area is enhanced by the herds of elk and buffalo which thrive naturally and abundantly therein. Approached but not entered by highways, this primitive area offers rare opportunities for extended wilderness enjoyment.

The rim-to-rim trail across the Grand Canyon bisects an amazing wilderness. Sequent chapters of geologic history are here spectacularly exposed in colorful land forms by the dual processes of erosion and uplift. Shifting highlights and shadows progressively accentuate the color features of the canyon terrain. The terrifying turbulence of the mighty silt-laden Colorado is relieved by the comparative tranquility of its quiet stretches. The aspect of bordering canyon walls from the river level is truly one of isolated wilderness.

Separated, and highly elevated by formidable escarpments from all surrounding terrain, the great densely forested Mesa Verde tableland conformed exactly to the wilderness requirements of early agricultural Indians, who sought the natural protection to homes and fields that precipitous canyon walls presented to aggressive nomadic enemies.

Known to have been intensively occupied and utilized through a period of more than six centuries—to the beginning of the great 23-year drought ended in 1299—the forces of nature have restored the vegetative cover, and largely erased or buried the evidences of past occupation, save for the remarkable remains of their cliff-dwelling homes.

Since road development has been restricted to a single entrance highway traversing the North Rim, and to Chapin Mesa, one of the many tongue-like secondary mesas formed by the paralleling system of secondary canyons, Mesa Verde remains largely a wilderness of precipitous canyons and intervening mesa lands, enhanced by revealed and undisclosed human history.

The greatest wilderness area in the United States without roads for motorized traffic, facilities for public accommodations, or terrain suitable for airplane landing is the primary Colorado River Basin in southeastern Utah and its contributary drainage system, including the Green River from above Labyrinth Canyon and the San Juan from below Mexican Hat, to their confluence with the Colorado. This practically unknown area, approachable only to bordering rims by one road on the east, one on the north, and one on the west comprises an area of upwards of 7,000,000 acres of spectacularly eroded and brilliantly colorful mesa, cliff and canyon terrain, which because of the rugged character and inaccessibility, can best be viewed by airplane.

Some will say that entering, bisecting or looping a national park with a primary access highway and establishing public accommodation alongside constitute wanton destruction of wilderness values and justifiably so if road development is excessive or unnecessarily scarring and the structures of man are not harmonized with the character of the terrain or obtrude obnoxiously or inescapably in the foreground of Nature's magnificent exhibits.

That mistakes have been made in the past is frankly acknowledged. That they may be made in the future under duress of public pressures is conceivable, despite the fact that the Service is guided technically in

all physical developments. The decisions of public institutions supported by tax funds under the democratic form of government are sometimes nullified by public pressures in the processes of legislation and appropriation.

I cannot overemphasize the desirability of not opening up more of park areas to motorize travel. As a means of primary access to centers of visitor accommodation and reasonable approach to primary exhibits, roads serve a justifiable function in national parks. Extension of motor highways beyond this limitation is only justifiable when objectives achieved outweigh the resultant physical destruction, disturbance and impairment of wilderness values. On such a basis, designated primitive areas of national parks may never be violated by motor highway development as long as natural values survive.

The inherent desire of human kind to tarry, relax and seek new inspiration in areas of surpassing natural beauty and charm has been markedly lessened by the tempo of modern life. The disturbing factor to the wilderness enthusiast is that man generally is a lazy creature, grown softer with the advent of the automobile and the paved highway. He has become so accustomed to the comforts of the modern automobile that vacation habits have been modified to its use restrictions. He superficially views the passing panorama of scenic splendor at maximum allowable speeds, his tempo for rest, relaxation and wilderness enjoyment being geared apparently to the speed of his car. He wants roads developed to remote objectives, and exhibits a gregarious tendency to remain overnight where crowds are densest.

Yosemite's glorious high wilderness country attracts only the limited few from the congested valley floor, even when the remarkable manifestations of tumbling water have seasonally recessed almost to the disappearing point.

For the past 17 years, I have observed the growth of these trends with increasing concern. As a responsible field officer, I have been forced, reluctantly, to realize that indicated desires of the vast majority of the more than 15,000,000 park visitors of the past year constitute a mandate that is perhaps inescapable as to primary access roads and adjacent visitor accommodation in new national parks.

However, by the same token, in view of changing travel trends and vacation habits, the policy of the National Park Service in perpetuating wilderness areas and aspects is assisted and fortified.

It has been publicly stated that true wilderness areas are not by their nature compatible with national parks. The answer to this question is that national parks are the only recognized areas that today actually provide complete preservation of wilderness values. Search where you may, you will not find in any approved Act of the Congress, like authority and instruction to insure equal preservation of wilderness values on other publicly administered domain. By the nature of their authority,

approved Congressional Acts are more permanent and binding on their administering agencies, and less subject to change than the pronouncements of lesser administrative authorities.

To establish primitive areas within national forests, the Secretary of Agriculture had to terminate lumbering, grazing by domestic stock, mining and other commercial uses on lands embraced therein, to exclude public roads for mechanized transport, public airplane landings, and public concessions, such as hotels and summertime homes. Activities terminated on these lands were legally established functions of Forest Service management. Excluded developments and operations were permissive uses of forest lands.

Perhaps it is the modern world that invented loneliness in the deserts of civilization, from which the automobile now provides the primary means of escape to the charm and loveliness of open country. People generally are beginning to look back upon primitive nature as something of exceptional value and fundamental significance to mankind. In reality, contacts with nature through the vast period preceding the rapid growth of civilization had a very great effect on mankind.

The perpetuation and preservation, unimpaired, of wilderness values of national parks continue as its most potent ideals and functional objectives.

The Primitive Areas in National Forests

C. M. GRANGER, Assistant Chief, Forest Service

I GREW up in Pasadena, California, and led the life of the usual small-town dweller with occasional trips to the seashore or to the near-by mountains, but never an excursion into more remote frontier areas other than by train across the deserts of the Southwest in the pre-automobile days. I went to college in Michigan, took the examination for the Forest Service, and in July, 1907, was sent to what is now the Sequoia National Forest at the southern end of the Sierra Nevadas. I was given assignments which took me, in company with the various district rangers, to the back country where travel was then exclusively by horse and pack horse. I remember as keenly as if it were yesterday the great thrill I got in being in a country where no other persons were encountered for days at a time and in the realization that it was nearly one hundred miles to the nearest railroad station.

My conviction is that the average person is similarly thrilled by getting into country which has the principal elements of great remoteness from the daily experiences and artificialities of life and the customary surroundings. This belief is so firmly lodged in the minds of those who direct the land-planning policies of the Forest Service that it has brought about a definite and large-scale provision within the National Forest of areas where this experience may still be enjoyed.

In those early days, however, when the National Forests were still young and much of their area still unopened, the prevailing sentiment in the western country was that there was still too much wilderness. The urge was for development, for more roads, and there was, of course, a sharp rise in this curve of desire for development with the advent of the automobile. Then, too, the men of the Forest Service themselves, whose job involved the administration of individual areas larger than some of the Eastern States, felt unduly handicapped by the tediousness of horse travel over terrifically rough country. This handicap was especially oppressive in dealing with forest fires, where prompt suppression required prompt access.

Thus, in a comparatively few short years, much of the untouched country was opened by roads, and there came a sudden realization that relatively there was not a great deal of the old wilderness left. A definite plan for assigning considerable areas to indefinite retention in the wilderness state began to take form.

My recollection is that this movement was first sharply focused on the Superior National Forest in northern Minnesota. Here there existed the only large area of roadless canoeing country in public ownership left in the United States. A little group of men, including Aldo Leopold, asked for the exclusion of roads from the territory embracing the choice canoe routes. This proposal at first threw some consternation into the ranks of the men responsible for fire protection in that extremely difficult fire country, because they did not see how the country could be saved from fire without roads. Rather quickly, however, these administrative necessities were reconciled with the acknowledged importance of keeping this country a canoeing country, and not one for the invasion of automobiles.

In casting about over the National Forest areas to find those portions which might be classified as primitive areas, we naturally found that in many cases there were certain established uses often antedating the creation of the National Forests. In many cases, the grazing of cattle and sheep had been going on on these areas almost from the beginning of the livestock industry in the West. Prospecting or actual mining operations had also found their way by trail into some of the most remote areas. Therefore, it was impossible to find many really large tracts wholly free from the invasion of any economic use.

Nevertheless, there were found a good many quite sizable portions of the National Forests which, despite some economic use, still retained most of the characteristics of the wilderness—the early frontier—and which could appropriately be classified so as to retain that character indefinitely. Under this concept, these areas were given the designation of wilderness areas (the term now is primitive areas) and dedicated by specific order to that form of use. Naturally, the available areas were mostly those undeveloped because of relative scarcity of economic

resources within their borders, so there was no measurable conflict with demands for economic utilization of the resources of the National Forests.

For each one of these primitive areas a specific plan has been prepared embracing the principles of management which are to apply. This plan is formally approved by the Chief of the Forest Service, or, in some cases, by the Secretary of Agriculture, and can be changed only by the formal act of the approving officer.

In most cases, the management plan provides for either no utilization of the timber or very restricted logging. On about two-thirds of the areas the continuance of grazing as an already established use is permitted, but in most cases the grazing use is rather limited. Reservoir developments are found to be quite unlikely on practically all of the areas. Hotels or other resorts and developments of similar character inconsistent with a wilderness classification are positively excluded. While in some cases pioneer roads had already invaded parts of the areas, further road development is excluded in nearly all cases. Consideration is now being given to eliminating from primitive areas those portions where roads have already been constructed or which cannot be properly protected without building roads. Trails necessary for protection or the use of the area itself, and the essential fire protection improvements, are provided for. Incidentally, the growing use of radio greatly diminishes the need for telephone lines into these back countries. A recent development has been emergency landing fields for fire protection, but with their use for commercial plane travel prohibited.

Today, there are in the National Forests 73 primitive areas totaling over 14 million acres. They range from a few thousand acres to one which contains over one and a half million acres; 30 of the areas contain over 100,000 acres each, and quite a few more are not far below that figure. As can be seen from the map, these areas range throughout the West, and include every major forest type.

Current review will no doubt show that a number of these areas are too small or otherwise not qualified to retain the classification of primitive area as more recent definitions describe it. Naturally, most of these primitive areas are in the West, though there have been established in the Eastern National Forests quite a few small natural areas (an area which is preserved altogether in an untouched condition), principally for study of the natural laws which control forest growth. A census recently conducted shows 40 more areas of 100,000 acres or more each still devoid of roads. These are now being studied to determine which of them may be given a primitive area classification.

How many primitive areas should there be in the United States? Where should they be? How large should they be? These questions are hard to answer. It is relatively easy to say how many campgrounds are needed to take care of a fairly measurable camping load, but who has a measuring stick which will define quantitatively the area which

can profitably be used in its primitive condition to serve the intangible and immeasurable spiritual needs of the people? The only immediate answer is to keep roads out of the remaining roadless areas until more study and more experience show specifically for each area whether its highest use lies in retention as part of the frontier or in development.

Fortunately, the National Forests are so vast and offer such a variety of recreational use along with their other uses that it is possible to provide extensive primitive areas as a part of the balanced program of recreational and economic use of these public properties. These National Forests primitive areas are supplemented by those portions of the National Parks which are found to be suitable for similar reservation and the very substantial areas recently given this classification of the Indian Reservations.

What is the best method and agency for the administration of these primitive areas? My answer is that by their very primitive, frontier nature the best administration is the least administration. Formality spells the death of the very reason for being of such areas. What they need is to be allowed to lie outdoors with only such administration as is necessary to protect them from destructive processes which are not a part of the normal operation of nature's laws, or where nature's laws must be partly held in check to prevent the destruction of the values which form the basis for the classification and dedication of these tracts.

The simplest, most appropriate and most economical administration and protection for a primitive area is that which can be afforded by the manager or custodian of the public reservation of which the primitive area is a part. These primitive areas would lose their quality if overrun by great throngs brought into them by the medium of too many organized trips. Their very charm and their spiritual value lie in the fact that one may find solitude in them. Anything savoring of Cook's tours on a large scale would be fatal. Their use by other than hikers is best facilitated by simple dude ranches near their perimeter where those seeking outings in such an environment may be adequately accommodated with horse transportation and guides if need be. These facilities should, of course, include those of sufficiently unpretentious character so that the purse of the person of limited means will not be too small to take advantage of them.

The question has recently been raised as to whether these areas should be given a definite legal status which will prevent changes in their boundaries or the revocation of their classification by administrative action. Fear is expressed in some quarters that today's order by the Secretary of Agriculture of the Chief Forester setting aside one of these areas might be modified or reversed by the successor of one of these officials. I think there is no categorical answer to this question. On the other hand, there is nothing in history to suggest hasty or ill-advised public action of this character by such administrators. In the

beginning, it was felt unwise to say as to any area that forever and ever its use will be of such and such a character. Economic conditions change, recreational habits change, centers of population shift, and many other fundamental changes occur which bear directly on policies and programs of use of public resources. Such changes, of course, could be recognized and provided for by suitable Congressional enactment if primitive areas were safeguarded by law. On the other hand, there is a good deal to be said in behalf of administrative authority to meet changes as they arise, provided that authority is exercised only after consideration of all of the public interests involved, which in most cases might appropriately be decided after public hearings on proposed changes. Furthermore, the adoption of the reservation-by-law method might readily involve delays and frustrations which would seriously retard and unsettle the movement.

Whichever course is ultimately decided upon, the important thing is to recognize and provide for the very great, if wholly immeasurable, needs for places where a person may go and find all the values that go with solitude and the interests which lie in seeing sizable samples of what this country looked like in the days of Lewis and Clark and their contemporaries.

Service of State Parks to National Parks

RICHARD LIEBER, President, National Conference on State Parks, Indianapolis, Ind.

If thou hast wanderings in the wilderness
And find'st not Sinai, 'tis thy soul is poor

AS I have been asked to contribute to the important subject under discussion this morning you will soon find yourself in the sad fix of Euelpides in Aristophanes' "Birds" when he inquired, "Who brought that owl to Athens?" So anything I could say on the subject would add little information for those present who are already better informed.

It seems that we park people, national as well as state, foresters, wildlife students and enthusiasts, in short, we Nature lovers, agree on essentials yet more or less stumble over policies, if not expediencies, in carrying out that which is demanded of us, namely the dual but conflicting duty of presentation as well as the preservation of these extraordinary places of natural beauty and interest under our care, whether they be state or national properties.

I have been asked to speak on the "Service of State Parks to National Parks." Being deeply interested in both of them it is my honest aim to seek for light instead of engendering heat. It would be much easier for me to reverse the subject and call it "Service of National Parks to State Parks," for that has been the case if you do not look any farther back than '33.

During the 18 years of its existence the National Conference on State Parks has coöperated with the National Park Service. This coöperation naturally has not been free from selfish interest because the planning of state parks has ever leaned heavily upon the ideals and experience of the great national prototypes.

Calling a group of men together for its first meeting at Des Moines, Iowa, in 1921, it was the thought of Stephen Mather that the creation of state parks should not only relieve pressure on the National Park Service, but also that much of superior scenic beauty still available in the States could be preserved if the various States would undertake the work.

I have always felt that it was not in Mather's mind to create state parks merely as a relief to the National Park Service from the necessity of opposing or being compelled to take over undesirable properties for national use, but inclined to believe that he hoped, as we all did, that the creation of state parks would relieve the pressure not only in the establishment of areas but in their use after their establishment.

While this particular relief has not yet come about, there is as much, if not more, need for state help. The greatest service which at this time an intelligent state administration could render through its park service is the lessening of the load of so-called historic monuments wished or to be wished onto the National Park Service for restoration and maintenance. If the Government can help with the initial cost, well and good, but administration and maintenance in all fairness should rest with the States. Such a Monument is part of the State's historic past as well as an asset in its economic present. Aside from that, an unreasonable increase in National Monuments and their cost ultimately will mean a serious loss of much-needed funds to the National Parks as well as the diminution of interest in and respect for a system which would include nonsignificant if not commonplace memorials.

It must be left to some future historian to trace out what actually happened in these last 18 years of extended park service, both in the parks and to the parks. Far from relieving pressure of use on national properties the result has been an increased pressure both on state and on national parks. When we built the first state park in Indiana there were 65,000 registered automobiles. There were no auto highways as we know them today. Indiana now has a million or so of registered cars and nearly 60,000 miles of hard-surface Federal, state and county roads.

The pressure came on us all at once and that which originally was planned as an adequate service area became quite insufficient to take care of the unexpected influx of visitors. I have always believed that a compact service area in which we necessarily sacrifice the natural aspect of the scene is in itself the best safeguard for preservation of any given park, provided that we restrict to a minimum the building of automobile roads and as we have been charged, metropolitan promenades, sometimes called trails.

Let us be clear then what we mean by our general theme "wilderness" or what it is that we are trying to preserve both in the national and state parks, likewise what the forces are which endanger this wilderness.

If by wilderness we mean the fortuitous residue now held in public ownership, a third question looms up, namely, is it our purpose to preserve intact—so far as that is humanly possible—this wilderness residue or are we proposing in a manner to make museum specimens out of this, that or the other feature in these public parks?

Over 300 years ago Captain John Smith and a band of English colonists made an onslaught on the American landscape. Now the conquest of a continent has been finished with all of its attendant gruesome waste.

The creation of our national as well as state parks is part of the great conservation movement which set in when we began taking stock of our national resources. So far as we parkmen are concerned there are still stately remnants of the pristine glory, in fact we can justly claim that some of the finest examples are in public possession, but nevertheless we have to face the fact that they are remnants and that any future subdivision will spell utter destruction.

I think that some bewilderment has come about in the use of the term "wilderness" which, according to definition, is "a tract or region uncultivated and uninhabited by human beings." What we perhapss mean is the preservation in its natural aspect of the area we have selected as park, barring only the unavoidable elements of intrusion demanded by service to the visitor and the provision for his physical comfort. For that reason I have never quite liked the idea of setting aside wilderness areas in state or national parks. If the area is a real park—one of outstanding beauty and interest—it must follow that the entire property should be treated, conserved and, if necessary, brought back as much as possible to its natural condition.

Speaking of saving wilderness areas in parks sounds to me in many cases either as an apology further to proceed with "improvements" or an alibi for having so far artificialized the natural prospect. There are many things that we now wish could have been handled differently. I well realize how easy it is to find fault even with what we have done ourselves and how difficult it was in the beginning to chart a course when the sudden change in national transportation set in, bringing masses and masses of people into these public properties, who had to be taken care of.

We realize now that the automobile has been the most powerful single factor in increasing this pressure. What a strange thing this automobile is! At one and the same time it has enhanced our appreciation and enjoyment of the scenery and on the other with concomitant highways has maimed and destroyed it. With respect to our parks, the majority of the millions and millions of folks who come in, unwillingly

destroy, yet every automobile tire and every human foot leaves its depreciating imprint on the scenery.

In February, 1935, Secretary Ickes made a statement on state parks which by implication also fits national parks:

> When state parks are more removed from crowded centers, if I had my way, I would foster and cherish the wilderness aspect of these areas. I hope as the States develop their own park systems, they will have in mind that citizens in time to come would like to know what the country in each State looked like before we civilized people came in and began to work our will on it.

It is high time that we lend action to this thought. As administrators we should have the courage to say "no" when more and more service with inescapable artificialities is demanded. Frequently we have taken an ill-advised step simply because we saw no avenue of escape. That happens every time, as the sapient Mr. Dooley used to say, when we take the second step without having considered the first one. With the current great expansion of recreational facilities we have not used enough care to separate the distinctive qualities of parks and have only too often over-expanded their recreational services instead of primarily maintaining the sanctity of its perfect natural entity. The strange thing is that, from the Secretary down to any one of us, we want to keep these great public possessions, whether state or national, for the enjoyment of this, and to preserve them for coming generations. Director Cammerer over and over, in the best tradition of his office, has pointed out the inviolability of a great national heritage. But, do we always succeed?

Conrad Wirth, speaking at the Skyland meeting of the National Conference on State Parks three years ago, submitted a clear-cut division between state parks that are primarily set aside for preservation and parks that are primarily set aside for recreation.

In support of my own thoughts on the subject I wish to quote from it the following sentences as fundamentals.

> While there is a tendency for park conservation areas and the park recreational areas to grow together, we must always bear in mind the distinction between them, and forever seek a means of separating these two types. I say this because if the bars were let down and no consideration given to park conservation areas (and that is an easy thing to do, for park recreational areas are very popular with the masses), we should soon find that they would encroach so far on our conservation areas that the latter would cease to be such and would automatically become recreational areas.

That is exactly what is happening both in the States and in the Nation.

Much of this wrong approach, forced on us as the inescapable results of an enormously expanding tourist movement, may still be cured; all of it must be avoided in the treatment of new properties. Do not let us yield to this vast rushing army of vacationists, viewing them as masses who have to be satisfied in whatever reasonable or unreasonable thing

they may demand, but rather as they surely would wish to be considered, as eager, thoughtful and kindly folks who would want to enjoy and to come under the spell of majestic nature instead of becoming, against their will, part of the forces of progressive destruction.

State Departments might well coöperate with the National Park Service to tell their people that any provision to take care of possible peak loads will ultimately not only spoil their own enjoyment and appreciation but will with certainty ruin that which we all love and which we have sworn to preserve.

Nor is there a better opportunity for the States to show their appreciation for the great help the National Park Service through Fechner's CCC camps has extended to them.

My concern therefore is not to set forth my own thoughts of deep love and reverence for our public wonderland nor of my vast pride in it. My hope is rather that we may find the help of millions and millions of our people who will, in better understanding of the great difficulties, work with us to protect the remaining scenic glory of our great country.

Let us all consider these marvelous and inspiring spots, large and small, as a sacred inheritance which, with all the strength at our command, we must protect against change and thus transmit them to future generations in order that they too in their time may find understanding of and inspiration in their own primeval America.

Wildlife on the National Forests

H. L. SHANTZ, Chief, Division of Wildlife Management,
U. S. Forest Service, Department of Agriculture

THE national forests grew naturally out of the public domain, and were set up near the beginning of the century as a result of strong leadership calling for a check in the destruction of timber, and with it, watersheds and drainage channels. This general movement which gave us the national forests and the national parks is now demanding that protection be given not only to Federal land, but to state and private lands as well.

The great block of land, comprising 170,000,000 acres of national forests in Federal ownership, must meet, by reasonable adjustment, the requirements of agriculture, industry and recreation. The best present and future use of land involves a careful consideration of physiographic and biological factors and the social and economic needs of the national and local human society. It must be managed on a land planning basis and the principle of multiple use reasonably applied.

The Forest Service must, as a managing agency, determine the relative needs for production of forest products such as timber, pulp and chemical wood; use of forage by livestock, use by wildlife; and recreational use by men. For about twenty years the Forest Service

has been making special wildlife studies, stressing stock-taking and the accumulation of data and their analyses as pointing the approach to a possible solution of the many and varied management problems.

Wildlife management in a modern sense is in itself new when applied to so large an area as that comprised in the national forests. In the minds of many, wildlife is still "ferae naturae," a thing of wild nature, which, like the wind and the sunshine, is not definitely tied to the land on which it lives.

But the problem is not a simple one. The physical environment, the biological interrelationships, the social and economic interests, divided legal authority, and the conflict of various agencies, make the problem very complicated. The Forest Service is attempting to meet these problems by placing its program on a sound factual basis with regard to the animals involved, the resources of soil, water, forage and weather conditions, to give equitable consideration to the various uses of the forests, and to meet the reasonable demands of conflicting interests and public agencies with comity and amity. We seek to know the resource in food, the extent to which this food is being used during different periods of the year, the extent to which wildlife and domestic stock injure other forest resources, the desirable size of herbivorous and other game population and which are the best and most desirable methods of controlling population.

The larger game animals are relatively evenly distributed over the national forests of the West. On the Pacific Coast our forage is utilized by large herbivorous game animals more than by domestic livestock, and the same is true of northern Washington, Idaho and Montana. In the central and southern Rockies both wildlife and domestic stock use is heavier. In the West more than 75 per cent of all the big game animals are on the national forests for at least part of the year. On these forests there has been a rapid and a sustained increase in number of big game animals since the forests were established.

The winter range problem is undoubtedly largely controlling in optimum numbers of big game. It pertains mostly, however, to lands outside the national forest boundaries, particularly in the western country. In general about 9,000,000 acres of additional winter range with more management in the better interests of wildlife are needed to go with present numbers of big game on the national forests, and about 25,000,000 acres with more consideration to wildlife requirements are needed to go with the summer game range capacity of the national forests even under present conditions of domestic stocking. Just how close these balances can be brought together is problematical, and certainly it will require very definite coöperation among all interested and affected agencies to bring about a more satisfactory year-round condition. The study that has been made of this factor in wildlife management deserves mention among the important developments.

The determination of the number of deer or elk or other large herbiv-

ora, their seasonal drift, and the extent of over-utilization of browse on part or all of the range, has occupied every national forest region. Deer, protected by a buck law and control of predators, have over-used their range, especially in winter. This is true particularly in eastern Oregon, northeastern California, central and south Utah, in the Lake States and on the Allegheny National Forest and the Pisgah National Forest and Game Preserve. Elk in Washington, Montana and Wyoming have badly damaged their range. Careful surveys of range utilization, migrations, and of the harmful effects of overcrowding have been made as guides to better management.

Plans under which the States and the Forest Service operate together to improve the conditions for game or fish production, set the number and sex of the game to be removed, in order continually to balance use with the amount of available forage and properly to adjust use by different animal species and recognize other desirable uses of forest lands, have been entering into in many places, thus enabling the Forest Service really to manage game and fish as it would any other forest product. Regulated hunting is recognized as the only remedy for the over-concentration of big game on many of the national forests, a condition which is gradually becoming worse. Continual buck killing does not control over-population and results not only in an unbalanced sex ratio, but deterioration of the herd partly by a lack of natural selection of males, and directed by shortage of food due to over-population. These facts are becoming increasingly evident as a result of careful checking combined with weights and measurements of the kill.

It is being generally recognized by such game authorities as Seth Gordon, Harold Titus and others, that more conservation will probably destroy rather than perpetuate herds of herbivorous game animals. To this end agreements in game management such as those now employed on the Selway in Idaho, with Georgia, Tennessee, North and South Carolina, on the Pisgah and Kaibab, and with many other States, in which sex and number to be taken can be decided on the basis of biological need, will prevent catastrophes such as occurred on the Kaibab some years ago.

The 1937 population of big game was nearly 150 per cent higher than in 1924 and the number of deer had more than doubled in ten years. Figures for 1937, some based on actual counts and some on estimates, indicate:

1,493,000	deer	on	157	national	forests
138,000	elk	"	93	"	"
54,000	black-brown bear	"	132	"	"
17,000	antelope	"	35	"	"
10,500	mountain sheep	"	56	"	"
5,100	grizzly	"	26	"	"
6,700	moose	"	29	"	"
17,500	mountain goats	"	28	"	"
6,200	peccary	"	5	"	"
600	wild boar	"	2	"	"

Our estimates of fur-bearing animals have not progressed as far as estimates on big game animals and more thorough observations are needed. Such information as has been assembled indicates present populations of 142,600 beaver, 227,000 muskrat, 129,000 raccoon, 146,000 mink, 270,000 skunk, 313,000 weasel, 150,000 fox, 73,000 marten, 47,500 badger, 6,500 otter, 9,000 ringtailed cat, 700 fisher and 600 wolverine. These estimates do not by any means indicate the maximum possibilities of fur-bearer populations on the national forests.

Estimates of predators show about 238,000 coyotes, 96,000 lynx and wildcat, 4,100 mountain lion, and 3,000 wolves on the national forests. The number of game animals killed in 1937 by predators was approximately 113,000 deer, 1,200 antelope, 4,600 elk, 1,500 mountain goats, 790 mountain sheep, and 52 moose. The estimated kill by hunters was 103,000 deer, 13,000 elk, 82 antelope, 700 mountain goat and sheep, 150 moose, 62,000 coyotes, 11,500 lynx, 712 mountain lions and 300 wolves. The predator kill is greater than the hunter kill in all game animals except elk and moose.

With over 70,000 miles of trout streams and large numbers of ponds and lakes, we have with the CCC and in coöperation with the Bureau of Fisheries and the state fish and game departments and state universities, made real progress in stream and lake surveys. With this factual material at hand, fish planting can be undertaken with assurance of success.

These studies are used as a basis for management plans whereby stocking and take are controlled in the interest of maintaining the highest possible sustained yield. As an example of the extent to which such studies have received attention, last year 30 lakes on the Snoqualmie National Forest in Washington were given physical, chemical and biological surveys, 130 on the Willamette National Forest in Oregon, and 1,003 bodies of water in the Lake States. In California on the Inyo National Forest, 35 separate stream areas have been set aside for studies of trout planting, food requirements, and the effect of fishing efforts. Retaining dams have resulted in permanent streams in which natural spawning has restocked many otherwise sterile lakes of the High Sierras. Stream-bank improvement, by fencing and the resulting improvement in fish food and conditions favorable for trout, has greatly increased fish production in New Mexico.

As the big game herds gradually developed in the Yellowstone National Park, the Forest Service has withdrawn domestic use of the area surrounding the Park until now we have a land area equal to 78 per cent of that of the Park on which domestic stock is not allowed to graze and which is held, except for the use of itinerant dude-ranchers' horses and Forest Rangers' horses, entirely for the use of wildlife. In handling our problems we have had the most friendly coöperation of the Park officials and we have worked together to secure a solution to the difficult problem of excess of elk on both summer and winter range.

The difficulties hampering ideal game management are chiefly (1) physical, such as unfavorable site, soil, plant cover, and variable weather; (2) biological, such as lack of balance between forage and number of domestic stock, forage and herbivorous game, conflict between game and domestic stock, between varieties of game, excess population on restricted areas, and depleted population on other areas; (3) political, in many of the States a lack of delegated authority or organization to enable them to coöperate with the Forest Service on this phase of our land management program; (4) ownership problems, in the inclusion of areas of privately owned land within the forests, and a lack of proper balance between summer range on the forest and winter range which is often on private ranch land in the valleys and foothills.

From the standpoint of the public there are those who wish nothing killed—not even the predators; there are those who want all predators exterminated; there are sportsmen who see only the game and cannot see the depleted range; there are farmers whose crops are being destroyed by game animals; and there are those who think we can feed our excess of big game, thereby developing a semi-domesticated herd.

The Forest Service is seeking a balanced economy which will somehow deal justly with these conflicting interests, protecting our wildlife and the land on which it roams, and meet, in so far as possible, the social and economic needs of the Nation and at the same time considering the local need; in other words, the management of the resources under a principle of sensible proportions according to locality.

National Parks and Wildlife

JOSEPH S. DIXON, Field Naturalist, National Park Service, San Francisco, Calif.

SINCE the national parks were set aside to preserve their outstanding natural features unimpaired for the benefit of future as well as our present generation, protection becomes a primary and major function of the National Park Service. This is particularly true with regard to the endemic plant and animal life found in our national parks, especially of those native species that have been exterminated from their former habitats by encroaching civilization. Many species have thus escaped impending extinction by persisting in areas that have subsequently been made national parks, which have become veritable "cities of refuge" for them.

The National Park Service has taken steps to have one "wildlife" ranger appointed in each national park, whose primary duty is to keep the Park Superintendent and the Wildlife Division informed as to plant, fish and all other wildlife conditions in that park. Through the coöperative efforts of the entire ranger force, an annual census is taken of the larger birds and mammals in each national park. The method used is to

count the number of deer, elk or bear in typical areas of known size or acreage and upon these counts is based the estimates which are gotten out each year. It has been our experience that if the same area is covered each season by the same man at the same time of year, accurate comparable results are obtained.

Probably one of the most exact censuses recently taken is the winter count of the Kaibab deer herd. Here, following a fresh fall of snow, with national forest, national park and Arizona state game officials coöperating, it has been possible, with an adequate number of riders, to cover the main winter range and to count most of the deer in a given area.

However, one fact is generally agreed upon by all parties, which is that preservation of habitat, including food, shelter and safe breeding places is essential to the continued existence of any species. The need for preservation of the various types of ecological habitats is essential if we are to maintain any adequate supply of native wildlife in our national and state parks. This is the reason why the major portion of the time and efforts of the wildlife technicians of the National Park Service has been spent in examination and study of possible and probable effects of the hundreds of projects that are proposed each year in our national and state parks. The inter-relation of living animals is also studied by our wildlife technicians. Thus one man is giving special attention to a study of the food habits of the coyote in Lava Beds National Monument, and another to a study of the food habits of the coyote in the Yellowstone region.

Another example of great importance has been forage problems of deer in Yosemite, Sequoia and Zion National Parks. In all three areas mule deer have increased until they have become so numerous that they have threatened to destroy certain *native* plants and shrubs which are most palatable to deer and hence their preferred food. When the most desirable food is exhausted the deer turn to the less palatable food plants. In order that we may have some "yardstick" by which we can measure this "deer pressure" on native vegetation, we have erected, through the help of CCC enrollees, a series of small selected fenced areas or plots in representative forage areas on the floor of Yosemite Valley, as well as in Sequoia National Park and at other critical areas. These sample plots are small, usually being 50 feet square, and are fenced so as to exclude deer but to admit small mammals and birds. Some surprising results have already been shown by these fenced plots. Thus the first season after the plot had been fenced at the lower margin of the Bridal Veil Meadow in Yosemite, I found that the deer nipped off and ate 80 per cent of the heads of the cow parsley just as the flowers started to unfold while inside the fenced area none were destroyed. In a similar manner, the second season I found by actual count 60 fine, healthy plants of the Small Tiger Lily (*Lilium parvum*) in full flower inside the fence and only four flowering plants of this species could be found out-

side the fence where they formerly had been equally numerous. Similar surprising results have been noted and recorded in other fenced sample plots.

Another important phase of ecology study in Yosemite is carried on by the Yosemite School of Field Natural History. Each year a group of twenty graduate students chosen from universities from all over the United States gather for six weeks of intensive field work in Yosemite. Three weeks out of the six are spent in special ecological study. Each year a special area is chosen on our Boundary Hill reserve area. In this selected area a detailed study is made of every living thing found there, starting with geology and soil formation and continuing on up through plants, trees, insects, amphibians, birds and mammals. The location, kind and size of each growing tree, shrub and plant is accurately plotted on graph paper. Photographs are taken and the whole finished report is placed on permanent file in the Yosemite Museum. Not only does this give definite data for present administrative use but it also provides *accurate, detailed* information for the future. Thus it will be possible in 1997 by consulting this permanent record to learn just what the conditions were there in 1937. An accurate record of conditions as they existed on the floor of Yosemite Valley in 1837 would be priceless to us today.

In our national parks we are making special efforts to preserve such vanishing typical North American mammals as bison, bighorn, wolverine, timber wolf, fisher and pine marten. Let us examine into the areas that offer possible hope for the future for certain of these species. Let us take the grizzly bear and timber wolf as examples of large carnivorous animals which cannot well be maintained on the open cattle ranges of the west because of their destructiveness to domestic livestock. The grizzly bear which was selected as the state animal of California was formerly one of the best-known and most widely distributed species of mammals in California. Yet, through the coming of civilization and the settlement of the State, this, the outstanding mammal of California, became extinct in practically one generation. In my study and investigation of the faunas of the national parks of the west I find only two; Yellowstone and Mount McKinley National Parks, that have sufficient size, climatic conditions and practically an adequate natural food supply to insure perpetuation of a breeding stock of grizzly bears and timber wolves. Even California, with its four national parks, was unable to save its native grizzly bear from extinction.

Fortunately in the case of the Trumpeter Swan, steps were taken in time to preserve this largest living North American waterfowl from impending extinction. Not only has this rare species received special protection in Yellowstone National Park but through the coördinated work of the Biological Survey critical areas in the Red Rock Lake area have been secured as Federal wildfowl sanctuary. The future home and existence of the Trumpeter Swan now seem definitely assured.

In a similar manner the Rocky Mountain Bighorn, including the various geographical races, needs protection for the future for it has been killed and greatly reduced in numbers over much of its former range.

I wish to place the greatest possible emphasis on the need for preserving the ecological niche or habitat of the animal that is to be preserved. No animal lives entirely by itself alone. It is dependent upon many other factors involving other plants and other animals, including man.

Our aim in national parks is not only to preserve certain native trees and animals but also to preserve the whole original primitive picture by permanent preservation of typical native plant and animal communities. Such native communities are valuable sources of scientific data that will be increasingly difficult or impossible to obtain elsewhere. The need for such areas is keenly felt by the biologists of today and future generations probably will feel their need even more keenly. I therefore firmly believe that the human need for, and value of, such primitive plant and animal communities will be greater in the future for the education, inspiration and enjoyment of the people than it is today.

If we are to effectively insure the future of our outstanding native wildlife three steps are necessary:

1. We must see that an adequate pure native breeding stock of the species is preserved and maintained to insure its future.
2. Not only must the species itself, but the accompanying plant and animal community or ecological background be preserved to insure proper preservation of the animals.
3. There must be adequate technical supervision of men trained in this work which should not be turned over to a construction or camp foreman. Wildlife management calls for wildlife training and experience.

A National Park Service Fish Policy

DAVID H. MADSEN, Supervisor of Fish Resources, National Park Service

IN REVIEWING the history of the National Park Service, we are confronted with the fact that our policy with reference to fish and fishing has, until recently, been entirely inconsistent with our policy regarding every other form of wildlife in the national parks. If we had followed the same policy with reference to wild animals in the national parks that we have followed with our fish-stocking program, we would probably have the red deer of Europe intermingling with the mule deer of the Kaibab; we would have mountain goats in the Tetons, Chinese pheasants in Yosemite and so on. Conditions similar to these have actually taken place in our fish-planting program. We probably have no less than 20 to 30 non-native species of fish permanently established in national park waters. There is not a national park where fishing is

important that has not been subjected, in a greater or lesser degree, to this violation of national park policies.

Since we have encouraged fishing in the national parks and the resultant program of fish hatcheries and fish planting in order to maintain good fishing it does seem our definite duty to predicate that policy upon the theory that we will, insofar as possible, protect the native species of fish in the national parks. With this definite purpose in mind, we have developed, and there has been approved by the Director, a definite fish-planting policy. This policy has for its purpose the protection for all time of such national park waters, as are not already contaminated, against the introduction of non-native species. As a result of this policy, it is our belief that there will always be lakes and a few streams in the national parks that will remain natural insofar as aquatic life is concerned. The policy further states that in waters where non-native fish now exist with the native species, the latter will be favored in every instance to the fullest possible extent. The policy further provides that no agency, Federal or state, shall in the future be permitted to plant fish in any national park except with the approval and under the direction of regular National Park employees. The policy further provides that no aquatic vegetation of any kind shall be introduced into the park waters for the purpose of improving fishing. The whole purpose of the policy is to give the National Park Service complete control over the aquatic life in the parks in the same manner as it controls other forms of animal life. The Service also supports the trend away from the use of natural baits, and whenever possible regulations are drawn permitting only the taking of fish by artificial lures.

While this policy is only slightly more than two years old, it has been enthusiastically accepted by the general staff and by the various Superintendents, as well as the American Fisheries Society. The necessity for the strict application of such a policy is apparent from what has already been said. Much more emphasis might well be placed upon its importance.

The insistent demand on the part of sportsmen for more and better fishing everywhere calls for an ever-increasing output and a wider distribution of fish. Unless due regard is given to the species used, this is a permanent threat to waters of the national parks. This demand has been effective in bringing about the establishment of great fish hatcheries within and adjacent to the national parks and national forests. The output of these hatcheries is distributed by the Bureau of Fisheries, State Game Commissions and State sportsmen's organizations in order to "improve" fishing. In order to insure the continued existence of our native fish populations, it is mandatory that a well-trained staff of park employees supervise all fish planting.

While we hope we have succeeded in establishing a policy which will protect the national park waters from further abuse, our position in

state parks where the Service has coöperated in development of water resources, has not been clearly defined. An extended field trip was taken early last year inspecting state parks throughout the Middle West. A considerable number of areas were visited where, under our direction, lakes were being created whose primary purpose in many instances is to produce fish. We were disappointed to find that some of these lakes, created at great cost, were stocked with fish before they were really completed. Enthusiastic sportsmen's organizations had, in some cases, improvised small dams creating ponds of an acre or two in the basins where lakes were being developed. These same enthusiasts had seined fish from back water pools and planted them in the makeshift ponds long before the dams themselves were completed.

It does seem reasonable that, since we have already wrought such havoc because of our lack of planning and study, we should, insofar as possible, protect the waters under our supervision against the same mistakes in the future. The National Park Service has a great opportunity and responsibility for preserving and in some instances restoring the normal relationship between all forms of aquatic life, including fish.

While we are, and I think we shall be, compelled to operate fish hatcheries and maintain reasonably good fishing in the national parks, we should keep constantly in mind the fact that insofar as possible it is our plain duty to maintain the parks in their natural and primitive conditions. To accomplish this we must have complete control over every activity which has to do in any way with changing the natural biological balance in national park waters.

STATE PARKS

PAPERS PRESENTED AT THE NATIONAL CONFERENCE ON STATE PARKS HELD AT NORRIS, TENNESSEE, MAY 11-14, 1938

The President's Message

RICHARD LIEBER, President, National Conference on State Parks, Indianapolis, Ind.

IT IS not accidental but on purpose that again we have turned to the South. For the eighteenth time we have come together in annual meeting to discuss state parks. Beginning with 1921 these conferences were held as follows:

1921. Des Moines, Iowa
1922. Bear Mountain State Park, New York
1923. Turkey Run State Park, Indiana
1924. Gettysburg, Pennsylvania
1925. Skyland, Virginia
1926. Hot Springs, Arkansas
1927. Bear Mountain State Park, New York
1928. San Francisco, California
1929. Clifty Falls State Park, Indiana
1930. Linville, North Carolina
1931. St. Louis, Missouri
1932. Virginia Beach, Virginia
1933. Bear Mountain State Park, New York
1934. Pineville, Kentucky
1935. Skyland, Virginia
1936. Hartford, Connecticut
1937. Swarthmore, Pennsylvania
1938. Norris, Tennessee

Geographically distributed, seven were held in the South, six in the East, four in the Central East and one in the far West. Regional meetings were also held in Kentucky, Ohio, West Virginia, Indiana, Illinois, Minnesota, Alabama, California and Arkansas.

During all this time we have seen our work grow and flourish. As an organization we started with little; just with an idea. And in a sense it may be said of us what Jung said about Columbus, "who, by using subjective assumptions, a false hypothesis, and a route abandoned by modern navigation, nevertheless discovered America." Withal we got there and the object of our attachment has slowly but steadily risen into clearer perception from attempted classification and coördination.

There is not much satisfaction to be obtained by looking up definitions in the dictionary when it comes to parks or park matters. We ourselves, as yet, have not fixed the exact meaning nor will we get a very clear picture by way of chronology. Yet it so happens that the first designated state park, now part of a great national park, gives us our cue, for it still remains the ideal of scenic and inspirational value. The reference of course is to Yosemite Valley. Yosemite Valley and Mariposa Big Trees were granted by the United States Government to California in 1864. There and then spoke to us out of the wilderness a commanding voice: "Protect the sources of your inspiration and your might."

The forthcoming report of the Park, Parkway and Recreational Area Study will disclose not only the number of state parks but also it is hoped will properly evaluate them. A digest of the completed study in this fashion could not only give proper appraisal to the properties themselves but moreover of the spirit and the quality of understanding of each State in that particular field. In this manner we would discover the need of parks and recreation in this million-geared and complicated world of ours.

Speaking for myself, I would not at all be interested in the work if the function of parks and recreation would merely be to provide shallow amusement for bored and boring people. Folks so disposed should be referred to bingo or any other of the abounding inanities.

Fortunately for all of us, parks have a quite different meaning which concerns itself, Antaeus like, with the physical necessity of man to keep in touch with nature. It is that eon-old longing of the soul to find a haven of rest. No matter how much we do indirectly by way of sports and athletics for the body, the spiritual hunger and search for things hidden is the true answer to the question, "Why parks?" Parks are the dietetics of the soul—a refuge, a place to regain spiritual balance and find strength and, if needed, a place of resignation from the turbulent world without.

So with tongue in cheek, let us consult the etymologists on the meaning of the word "park." An enclosed place. Such an enclosed place, they tell us, was paradise, or shall I say, is paradise. An intermediate Elysium, as some hold, for the souls of the righteous during the interval between death and final judgment. Shades of Dante and Milton. The old story of human hopes and aspirations, of agony and of defeat. Paradise Gained and Paradise Lost. So our attempt to recreate man by re-creating an environment, if humbly approached, will nevertheless leave us with a feeling that we are following out the age-old craving of our errant and searching souls.

The great national parks have blazed the way, the state parks have followed; of late in such profusion that we must determinately address ourselves to their proper use and management. While state parks, as such, are nearly 75 years old, the greatest expansion so far has happened within the last five years. How much of this ambitious program will live depends chiefly upon three items:

Proper Selection
Careful Planning
Business-like Administration

A state park cannot be planned but has to be found; after which planning may begin. When I look back only 25 years and see how some of us had to proceed in the preparation of an area, I am surprised that not more mistakes were made. There was only one saving grace—we did not have enough money to make big mistakes. So in paying a deserved compliment to the Branch of Recreational Planning and State Coöperation of the National Park Service for building up a corps of competent scientists and technicians the highest praise is that they have not made more mistakes notwithstanding the vast amounts at their command. This indicates the superior quality of the technical and scientific staff.

Could it be improved? Of course it could, but it can much more easily be depreciated. It should be improved by putting the whole "works" under competent Civil Service, and by whole "works," I mean

not only the unprotected part in the National Park Service, but the entire CCC staff. The building, planning and maintenance of all parks are so completely bound up with public weal that we should eliminate all partisan politics. It has truly been said that Democracy is the luxury of a rich nation, but are we really so rich that in the wasteful turnover of politics we can afford to sacrifice knowledge and experience and bog down once more to hit-and-miss practices of the rule of thumb? Nor if we persist in this extravagant and altogether foolish method have we any right to speak of popular government? That sort of thing is not popular and never has been popular. The people are merely helpless because their opinion and wishes have not been followed. I remember the time when the people wanted parks and did not get them because the politician saw no profit in them. But after they had been established, parks and recreation suddenly became of great value because the faithful could be given jobs in them.

We are concerning ourselves with the recognition of exceptional talent discovered in our CCC ranks; the preservation, use and advancement of such welcome talent in park and recreational work. We have prepared a plan which means even more than the offering of opportunity to the individual; it means the serving of a national ideal that to each citizen however humble be guaranteed equal chances. The charity of social security may well begin in society's own home.

See what has come out of the richest farm in Christendom, the acres of one Thomas and Nancy Hanks Lincoln in Indiana.

If you agree to the Committee's report prepared by Roberts Mann, and follow it with driving action, we will see results of which in another 18 years it will again be said, "They started with little; with just an idea." And in that hope and expectation I propose a name. Let the graduates from our proposed Park School be known as The Railsplitters. That name, I take it, will be fully understood without benefit of explanation from deserving patriots.

Let us now consider Park Administration. Just as much as the planning of a park must be along the line of knowledge and experience in the particular field, so the administration must be business-like. A park to live must earn its living. Ways have to be found by the States to put their investments on an income basis. If they are made dependent on appropriations, these appropriations will either be treated by the legislators as charity or as a political investment. In neither case will parks live very long or lead a useful, happy and successful life. On the other hand placed on a business basis and operated in the interest of the people, it is astounding how much service can be furnished for so little outlay. Parks are not eleemosynary institutions. Park visitors are citizens of a State who pridefully consider themselves stockholders in a growing concern and not suppliants of charity. In other words, they still are citizens and not "deficitizens."

The last four years have witnessed an increase of about 80 per cent in state park holdings. This addition of some 600,000 acres to the older state park holdings naturally need not prove the obvious fact of their existence as it must show a capacity for survival. To do that this vast and interesting domain must be put on a business footing, for it is a business as far as its management is concerned. And it can serve spiritual needs only if the material ones are securely taken care of.

I warn, as I have so often done, against a fateful dependence upon continued Federal and even state aid in the sense that the cost of part maintenance be put upon the people's tax duplicate, Federal or state.

To start a park either public or private funds have to be expended. That has been done in full measure, funds not only for acquisition of land but also for plans and projects.

From now on the entity will have to demonstrate whether it be an asset or a liability; a success or a failure.

So much for the general principle. In actual experience you will find that some of your infants will not do as well as others. Some have to be supported a bit longer, just as among your own children some attain stature and independence early while others have to be helped along. But while you love them all alike, you would go broke if the majority remained dependent on you for life.

As an example, let me give you some figures out of the experience of the state park system of Indiana, not because I consider its set-up superior to others but because I know it best.

Four Indiana parks, with Turkey Run far in the lead, in 1922 had a total income of $10,855.40. Compared with this the report for 1937 shows park earnings of $164,296.35 for a total of 9 parks. Of these parks 3 are more than self-supporting (115 per cent, 117 per cent and 168 per cent); 3 approach complete self-support. The average at this time for all large parks is 91.5 per cent. The memorials are 40 per cent self-supporting, which in the nature of things is a good showing. The total for all properties, including cost of administration, is 80 per cent. It is confidently expected that within a few years the entire system will be self-supporting.

Besides the stated park income, the Division receives further funds through the sale of sand, gravel and by way of coal royalties. The former amount to $65,099.73; the latter $1,539.59. To these three items is to be added the appropriation of $41,812.94, making a grand total of available park funds of $272,748.61.

When we started the work in 1916 our appropriation was just $10,000 and for that reason it was necessary that we should find an income. It would carry us beyond reasonable time to refer in detail to this system; however, it is at your disposal through our office.

We have seen then that the selection of park lands is akin to the work of the artist. It is a form of creation; a vision. Park planning is a

technical job and park management a business enterprise. If these three items are harmoniously balanced they produce as a result park Service. This is fulfillment of the promise to provide a delightful place amid natural surroundings for re-vitalization and recreation.

We thus close the circle. Having had our vision of a Park, having carefully planned and managed it, we have truly helped to provide "A thing of beauty and a joy forever," for this Park Service in its widest sense is nothing else but a vision attained.

Responsibilities of the State

ARNO B. CAMMERER, Director, National Park Service

THIS conference is timely. We urgently need to confer. Parks are a vital ingredient in the daily bread of our Nation. Parks will succeed or fail by what we do in the near future. The person who cannot recognize the loss has never seen the opportunity.

In the last five years, parks have been projected from a position of comparative obscurity to a position of large national prominence. Most of you are concerned with some phase of park work. You are all, therefore, familiar with the accomplishments in the park field—national, state and local—and there is no need for me today to review the encouraging steps of our progress as I did last year. *Because* of that progress, infinitely greater importance attaches to what we do for parks right now.

The same circumstances and source-funds that have accelerated the park movement have likewise accelerated the competing forms of land use. Never before have civic and political units been so conscious of the planned development of their resources. In the development of local, state, and regional plans, each organized commercial interest has used every power at its command to be certain that every square foot of the territory should forever be open to that interest's particular type of exploitation. Not one organized commercial interest is willing to keep its hands off of an area of park caliber until it has plowed, harrowed, winnowed and sifted every particle of the area for the last possible measure of value; then it is quite willing to turn the area over for the benefit and enjoyment of the public, to be restored and rehabilitated at public expense. The story and the play are old, but the cast is organized and modern.

Advocates of competing forms of land use are alarmed at the relatively cheering progress made by parks. They are out to hit parks and hit them hard. Their propaganda is so persuasive that they even have some well-known park advocates quaking in their boots for fear that parks may be too successful and succeed in strangling the economic life of the country. This might be termed "shivering at one's own convictions."

There is no need to elaborate on that phase of park work. Every park man is familiar with it, and every park man knows that his watery-veined friends form the outposts of the enemy camp. But, in the face of these facts and conditions, is it not time for all true park conservationists to unite?

The National Conference on State Parks, as well as the American Planning and Civic Association, should be more than a clearing house of information. It should be a nation-wide organ for focusing park opinion and leading park support. Such an organization through its members and sympathetic friends could implant parks so firmly into our national consciousness and into our national scheme that no selfish drives, no predatory raids, would be successful.

The question is: "What will you do about it?"

The second question also rests with the States. It relates to our great opportunity. What are we going to do with it?

Millions of dollars of Federal funds have in near years gone into the development and stimulation of the state park movement. The States and the Federal Government are justly proud of this coöperative undertaking. But, how far will the States now go to provide for the maintenance and proper use of the park facilities that have been given them? Upon the answer to that question hinges largely the fate of the park movement, at least so far as this generation is concerned.

The enemy, of course, has sprinkled the word around that the National Park Service wishes to get hold of the state parks and control them. Such a rumor is either the figment of a hysterical mind or else it is definitely calculated to be misleading. Even some state park organizations have been tipped by this green paint. Obviously the answer does not lie in a whispering campaign but in the States' shouldering their own responsibilities. The more they do, the less there will be for the Federal Government to do and the more will be achieved in the ultimate. No State that is carrying its share is going to be hood-winked by the State that says, either, "Let Uncle Sam do it," or "Uncle Sam wants to do it all."

We park people should be wiser than lambs and not half so sleepy. We should recognize the propaganda that would split our ranks and dissipate our efforts in futile bickering among ourselves; we should learn to ignore that kind of propaganda. Actually, when all the pettifoggery is stripped away, we have but one simple shining goal, and that is the welfare of the parks. No other form of land use can take their place, despite all the glittering promises to the contrary, and no other administrative agencies will ever be half as diligent in protecting park values as the park authorities themselves.

EDUCATION

A Program of Education in Landscape Management

ROBERTS MANN, Superintendent of Maintenance, Cook County, Illinois

EDITOR'S NOTE.—Perhaps the outstanding contribution to the 1938 National Conference on State Parks (which heard many constructive talks) was the Preliminary Report of a Committee of the Conference, headed by Dean Stanley L. Coulter, of Indiana. The following is a summary of the report, which is a contribution by the Forest Preserve District of Cook County, Illinois, to the National Conference on State Parks, through the medium of the investigational work on the part of Roberts Mann, who is Superintendent of Maintenance for that organization. The complete report is available in mimeographed form.

THE deeper significance of the term *Landscape Management* represents a fundamental function which includes both *forest* and park recreation, epitomizes what we are really thinking about—mass recreational use of native landscape—and transcends any distinction between arbitrary, bureaucratic divisions of that use.

The development of native landscape areas for recreational use has proceeded faster than the development of men trained in their design, operation and maintenance. The almost universal lack of funds for proper operation and maintenance further increases the crying need for men with background, perspective and a sense of values.

This Conference recognized that the past four years of ECW, CWA, FERA and WPA participation have resulted in the creation of new state and county systems, both forest and park, and the development—in many cases the *overdevelopment*—of existing systems. Much of the work done has been badly planned and poorly executed. An acute maintenance problem exists as well as an acute design problem. Men with adequate, proper training to handle these problems are few. At the same time there is a wealth of potentially valuable men about to slip back out of sight—men uncovered and partially developed as superintendents, foremen and even enrollees in CCC camps, in WPA, and as park or forest custodians.

The Conference also deplored the lack of academic standing for men trained in landscape management as contrasted with foresters, landscape architects, architects, engineers and wildlife management men. It recognized the difficulty confronting those attempting to hire men for either the design or maintenance of a recreational area subordinated to the preservation of the native landscape. The specialist has his recognized place. We will always require the technician for the major jobs of forestry, landscape architecture, architecture, engineering, wildlife management and recreational planning. The man with what President Conant of Harvard so aptly termed "a unilateral bent" is invaluable for a purpose. But the field of landscape management requires men of "multilateral" bent with training integrating the several phases of that field. It involves not a compromise but a synthesis of conflicting ideas and needs.

Your committee, appointed to consider the development of a course of instruction in "public land administration," approached the problem with two objectives: first, short courses of instruction to be given groups of partially trained men in the lower income brackets, at universities or regional centers and, second, undergraduate instruction in the universities. Three other desirable steps have appeared as by-products of the investigation. One is the inauguration of "return courses" for men in the higher income brackets, actively engaged in landscape management, and "institutes" or "congresses" to keep such men abreast of the latest developments in their profession. The second is the summer employment of undergraduates specializing in landscape management or some of its phases. The third is the selection of a short but inclusive title for this hybrid profession, and I throw the designation "Landscape Management" into the ring, aware that there is likely to be as much conflict over title as there will be over program and method. At least it places equal emphasis on parks and recreational forests.

Paradoxically, we have been confused by the very eagerness of the universities to coöperate in a three-point program, though warned at the outset that such would be the case. This eagerness to be of greater service and more fully utilize their plants, equipment and teaching personnel is most welcome as concerning adult education, that is, the winter short courses for field men in the lower brackets and congresses for men in the higher brackets, but renders difficult the consideration of the proper curricula for undergraduate training. This new fluidity and this responsiveness to the changing needs of the times, motivated by the ideal of maximum educational service, was the most striking impression received at the several universities visited.

WINTER INSTITUTES FOR NON-COLLEGE MEN IN THE LOWER INCOME BRACKETS

Winter short courses or "institutes" for individuals in the lower income brackets, usually having less than college entrance requirements but of exceptional intelligence and aptitude, probably should not be limited to adults but should be available to outstanding enrollees or former enrollees in CCC camps. It does not seem advisable or practical to hold these institutes at regional centers as such, nor indeed at any college where the teaching staff, the buildings, the woodlot or experiment station, and the available state parks or forests are not of the highest order. Much of the value in such institutes will lie in the background and inspiration offered. Subject matter is secondary. What these men and boys need is background, a sense of direction and a high standard of values. Subject matter must be presented with these three needs in mind, and the desired presentation can be given by comparatively few men in the teaching profession at the present time.

Subject matter taught in lectures, "labs" and field trips conducted by

the university staff should be supplemented by lectures from nationally known leaders in various phases of park and forest recreation. Such men have many demands upon their time and certain inescapable obligations. Short consideration was given to the holding of these schools in regional centers other than universities because of this recognized limitation upon the participation of outside men of established reputation. And yet a few such lectures are essential. More background—more inspiration! More than one of the younger attendants at these annual meetings of the Conference have been inspired to new heights and have gone away imbued with new enthusiasm for a profession that can attract to it such leadership.

The designation "institute" was suggested as a euphonious substitute for the term "short course" to which some opprobrium still clings. The length should be four weeks. It should commence at least two weeks after the beginning of the second semester—say March 1st. The number to be given instruction at each university must be greater than 20 but should not exceed 75. The men sent should be selected carefully and at the close of the institute a report should be sent to their respective sponsors rating each man as to attendance, attentiveness, application and aptitude. Where possible, as at Michigan and Syracuse, the students should be housed in supervised dormitories and fed in a dining hall or cafeteria, rather than allowed to scatter at will through town.

The cost to the sponsor will not exceed $150 per man, being variable according to the transportation to and from the institute.

The cost of board and lodging will not exceed $12.50 per week. The tuition will amount to something between $25 and $50. A tuition fee of $30 probably would cover the allowances to the several instructors for additional hours of teaching, the hire of an additional instructor, mimeographed material, and transportation for field trips. A fee exceeding $30 would provide a fund to cover the expense of bringing in outside speakers. The Conference will have to lend its influence toward securing men of prominence and speaking ability at a minimum cost.

The cost per man may prove a deterrent to many state forest and some state park organizations. If one of the great foundations could be induced to subsidize each of the institutes to the annual amount of $1,000 per university, a full and worthwhile attendance would be better assured.

For reasons too lengthy and impolitic for discussion here, three universities were selected and approached as best suited for the initial establishment of such institutes in 1939. The University of California regretfully declined. Professor Mulford of its Division of Forestry was keenly interested and sympathetic but obliged to abide by the decision of President Robert G. Sproul and of the Board of Regents to develop no new educational projects at present because of a serious financial situation. He was, however, thinking primarily of undergraduate instruction and of "return course" work which would require the acquisi-

tion of two new staff members—one in landscape design and one in forest recreation. Probably a winter institute could be inaugurated at California if a definite plan were laid before President Sproul and urged.

At the University of Michigan, Dean Samuel T. Dana and Professor Shirley W. Allen of the School of Forestry have been working with Professor Harlow Whittemore of the Department of Landscape Architecture to develop a program.

The New York State College of Forestry, at Syracuse University, through Dr. Laurie D. Cox, head of its Department of Landscape and Recreational Management, has submitted a complete program. It is set up on the basis of a month's work involving 3 hours of lecture each morning and a laboratory or field trip each afternoon, with a total of 72 lectures and 24 afternoon exercises. Dr. Cox has outlined a comprehensive program which would involve about twice this amount of work. A student would require therefore two years to complete the program. I can appreciate the value of a two-year program but I do not agree with his suggestion that the student in his first year be permitted to select the subjects he is most desirous of obtaining.

UNDERGRADUATE TRAINING IN LANDSCAPE MANAGEMENT

The consideration of proper training for undergraduates to be absorbed as career men by park and forest organizations presents many baffling and controversial problems. By the same token it carries with it grave responsibility. Educators have been wrestling with these or similar problems for many years—with varying success.

The Society of American Foresters—in the words of Dean H. S. Graves of Yale—has limited its function to the study of every phase of forest education, to the establishment of minimum standards, and the presentation of the results of its study and experience as affecting changes in or additions to the forest education structure. It would seem that this Conference should so limit its recommendations relative to undergraduate training in landscape management.

The Society of American Foresters issued in 1935 a "Professional Forestry Schools Report," listing 14 schools as "approved" and grading both these and seven others according to a determination of all measurable factors affecting the efficiency of instruction, with due consideration of the intangible factors of personality which in the last analysis determine the efficiency of professional instruction. Any committee of this Conference attempting to deal with undergraduate or graduate instruction would do well to study thoroughly that report.

The conclusions stated here must be taken as wholly my own and purposely argumentative. However, they do present a sifted synthesis of the considered opinions of the many very positive men with whom I have argued or conferred, some of them leaders in this field.

1. Basic forestry training is the first prerequisite in training for the design and administration of native landscape areas for mass recreational use.

The forester and the landscape architect both tend to approach such a task objectively, from without and above, but the forester, generally speaking, makes the better administrator. The engineer, the architect and the wildlife man tend to approach it subjectively, from within, from the viewpoint of detail.

2. Training in the fundamentals, history and design of landscape architecture is the next most important ingredient.

3. Elements of civil engineering, architecture, wildlife management and recreation management must be included.

4. The inclusion of cultural courses—the humanities—to develop an understanding and appreciation of literature, history, art, music and economics is peculiarly important as background in a profession so influenced by public relations. Nearly everyone seems to agree on this point, but the character and diversity of the subjects to be included provoke endless debate.

5. Not less than five years should be required for the completion of such a curriculum leading to the degree of Bachelor of Science in Forestry. Six years would be better still. Dean Graves of Yale believes a good background of general education essential as preparation for all professional study of collegiate grade, and urges a four-year course in basic forestry with some electives and several cultural courses as preparation for not less than two years of graduate study in landscape management.

The practical yet sympathetic man asks "But what of the boy who cannot afford six college years?" One answer to that would be the establishment of scholarships.

6. The proportion of the curriculum given by members of the forestry faculty seems to have a definite relationship to the quality of graduates turned out. Technical courses given outside the school of forestry should be specifically shaped to fit the needs of students in landscape management.

A case in point is the course majoring in "Landscape and Recreational Management" given by the New York State College of Forestry at Syracuse University; 72.7 per cent of the instruction is given by the forestry faculty. The courses in drawing, mathematics, engineering, architecture, and wildlife management, given in other colleges of the university or in other departments of the College of Forestry, have been pruned of all dead-wood and reshaped specifically to give the students in that department all that they need and no more. I went there prepared by a study of the curriculum to criticize a lack of sufficient engineering training. As an engineer I was amazed at the fundamentals mastered in the courses given and must concede the sound execution of the designs and drawings of reinforced concrete, wood and steel structures, of roads and of drainage systems. The same applies to architectural designs with complete detailed plans. The engineering plans were executed as an engineer would make them, the architectural plans as an architect would make them—any contractor could bid and build upon them. At the same time, the landscape work was superlative in originality, successful treatment of competitive design problems, draughtsmanship and handling of color.

Such a curriculum not only saves time but eliminates cluttering up the student's mind with a lot of facts and theorems he may never need. Further, instead of being a Wandering Jew of the campus he becomes one of a close-knit group with that cohesive kinship so rich in intangibles for the professional man.

7. There must be equal emphasis on park and forest landscape design and management for recreational use. The intimate relationships between the problems of the two types of reservations and the growing importance of forest recreation admit of no antagonism nor, indeed, of differentiation.

8. The faculty personnel should be composed of outstanding teachers in

their respective fields to insure the inspiration, background and high standard of values necessary for success in landscape management.

The multiplicity of subjects studied and the exclusion of all that does not particularly apply to this particular field may result in confusion and superficiality unless properly presented and correlated.

9. The availability of high-grade state or national parks and forests, as well as the excellence of the buildings, equipment, library and woodlots or experiment station, are factors in the suitability of a college to be approved.

10. The standard of graduates should be kept high and the output low. Students lacking in aptitude should be weeded out and "busted" or required to transfer to other branches of training. Here again is a delicate and difficult responsibility requiring the deft, personal guidance of sympathetic, able, scholarly teachers.

Mass production of "parkers" and "recreational foresters" is unwise. No one can say just how many landscape management men may be absorbed each year. Syracuse accepts from 35 to 45 freshmen each year and graduates from 10 to 15 which the park field seems to absorb without much difficulty. As the forest recreation field widens, and with the acceptance of standards set up by this Conference, the allowable output should increase.

It has been argued by some distinguished educators that we should select one good school and attempt to develop that school by bringing about there a concentration of the finest teachers in the field. The pitfalls in such a program would probably defeat any advantages to be gained. The function of this Conference would seem to be the formulation of certain minimum standards and the grading of the several schools offering instruction in this field.

At least three colleges offer courses in phases of landscape management. The New York State College of Forestry at Syracuse is entitled at present to the highest rating. Its curriculum for specialization in "Landscape and Recreational Management" is calculated to turn out well-trained men. They are now working toward a five-year course which will lighten the freshman year and give more cultural subjects.

The University of Michigan at Ann Arbor offers, through its Department of Landscape Design, a three-year course in the "Design and Management of Park and Recreational Areas" which must be preceded by at least two years of work in liberal arts and sciences. Michigan now submits to this Conference two possible programs for the establishment of a suitable curriculum in landscape management. They also are appended hereto. The one outlines a five-year course leading to the degrees of Bachelor of Arts and Master of Landscape Design in the College of Literature, Science and the Arts (four years) and the Graduate School (one year). The other outlines a five-year course leading to the degrees of Bachelor of Forestry and Master of Forestry in the College of Literature, Science and the Arts (two years) and the School of Forestry and Conservation (three years).

The Michigan State College of Agriculture and Applied Science at

East Lansing, in the Forestry Series of its Division of Agriculture, offers a four-year course with specialization in the junior and senior years in a "Recreational and Municipal Forestry" major. P. A. Herbert, Professor of Forestry, is dissatisfied with the present form of their course and proposes several changes along the lines suggested.

RETURN COURSES FOR COLLEGE GRADUATES IN THE HIGHER INCOME BRACKETS

These investigations have suggested the possibility of a third type of instruction which should be equally valuable, namely: "return" courses for college graduates actively engaged in landscape management —men in the higher income brackets—and "congresses" to keep such men abreast of the latest developments and trends in their profession. Most of these men have had good university training in either landscape architecture, forestry or engineering and now find themselves career men in a field demanding knowledge of all three of the older professions plus wildlife management, plus recreational planning. Most of them welcome an opportunity to supply deficiencies in their training.

Occasional men will find it feasible to enroll at some well-equipped university and complete the year or more of work required for a master's degree. Others would be better served with the opportunity to spend one semester or more taking either credit or non-credit work in various subjects. Such men would be definitely benefited by fellowships which the Conference might establish at one or more universities. Course work rather than theses should predominate.

Comparatively few men, however, will be able to sacrifice the time and income involved in a year's leave of absence. There are no sabbatical years in political subdivisions. The majority find themselves so fully bound by circumstance and the demands of their jobs that they have little opportunity to keep fully abreast of the developments in their field, limited time for reading, and little or no guidance in what to read. It is all too easy for a good man to fall or be forced into a rut.

The University of Michigan has been doing some remarkable work in arranging graduate study clinics whereby every practicing physician in the State can, if he will, keep up to date and abreast of the latest developments in the medical profession. Last year over half of the 3,600 physicians in the State took work in these courses and 15 or 20 were awarded a "certificate of proficiency" more highly valued than a master's degree; 145 were stimulated to attend special clinics outside the State, as compared with 25 in 1932.

Every two years in New York State the State Conference of Mayors holds a short course for professional park executives. Last year the conference met as guests of the New York City Bureau of Parks for approximately a week's study, with a quite large attendance.

A winter institute or "congress" for professionally trained men

actively engaged in landscape management would be of service. My own ideas on such a program are still in the formative stage. The length of the course, the subject matter and the manner of presentation are debatable. I would say that one week would be the minimum length and two weeks the probable maximum. The time of this "congress" could be made to coincide with part of the institute for men in the lower income brackets so as to secure the advantage of talks by one or more nationally known leaders in the profession. Illustrated papers and lectures might form the bulk of the subject presentation. Round-table discussions would be of definite value. Reprints of outstanding articles could be supplied and courses of reading recommended.

It is recommended that institutes for men in the lower income brackets and "congresses" for men in the higher income brackets be inaugurated during the winter of 1939, and that the universities of Syracuse, Michigan and California be designated as three locations for the initial effort.

PLACEMENT OF UNDERGRADUATES AND GRADUATES IN LANDSCAPE MANAGEMENT

At Syracuse and at Michigan State College the problem of placing both graduates and undergraduates in summer work was raised. In most four-year courses the interval between the sophomore and junior years is taken up by 10 to 12 weeks of summer camp. In five-year courses this occurs between the third and fourth years. If many of the boys studying landscape management—under whatever name—could be given work in the summer following the year of summer camp it would be of great educational benefit to them. As Dr. Laurie D. Cox phrases it, "They would be perfectly willing to accept work in any form of park activity in city, small town, county or state organization. All they want is a chance to see parks actually in operation and learn how the wheels go round." If such boys could be placed as laborers, assistant caretakers, or on survey parties at a wage barely sufficient to pay their living expenses, the background of practical experience would pay dividends in their subsequent year of university training.

Graduates just out of school have a difficult problem which would be partially solved if they could be absorbed in park and forest organizations on a temporary basis long enough to enable them to get their feet on the ground and at the same time subsist.

CONCLUSION

Out of *this* study I come convinced that *mediocre training, mediocre men and men without peculiar aptitude have no place as designers or administrators in the field of landscape management.*

New Attitudes in Conservation Education

PEARL CHASE, Santa Barbara, California

WE RECOGNIZE that for about 25 years there has been a growing realization of the increasing need for the practice of economy or, as it is frequently phrased, the wise use and development of our resources. However, the Departments of Conservation or of Natural Resources, established in many States, have in most instances been slow to realize their opportunities and slower to develop an adequate technique in relation to the education of the public on subjects related to the management and use of parks and forests, fish, game, mineral, soil and water resources.

CONSERVATION EDUCATION IN THE SCHOOLS

Wisconsin and Florida were the first States to enact legislation requiring instruction in conservation in the schools. (Wisconsin, 1935.) It may not be necessary or wise to enact similar legislation in other States but rather to encourage work along this line through the usual professional channels.

The Office of Education of the Department of the Interior has reviewed accomplishments in various parts of the country, has held conferences of official and volunteer agencies, and in 1937 began the publication of an important series of bulletins and bibliographies, both on the general subject of "Conservation Education in the Public Schools" and on specific subjects related thereto.

The keynote of the new approach is that, instead of teaching only a single subject or series of subjects classified as natural sciences, it is most important to supplement such instruction by work aimed at developing at all age levels the conservation idea. The fundamental purpose of conservation education is, therefore, the development of an attitude of mind and a way of living which will be evident throughout the life of the individual.

It is important to realize that the organization of a conservation education program in schools will be greatly benefited if continuing contacts are established with fact-finding and administrative agencies within the State. The official agencies will profit from the self-analysis required, the opportunity to secure a wider understanding of the principles governing their policies and activities, and the improved contacts with an interested public.

In a number of States, original and useful experiments are being tried with the coöperation of several agencies. In Tennessee the activities of the Department of Conservation have been described. (See page 115.) In States as widely scattered as West Virginia, Pennsylvania, New Jersey, New York, Illinois, Minnesota, New Mexico and California, Oregon and Washington, different approaches have been made to the

subject, on the part of school departments, largely depending upon the available leadership, sources of information, public interest outside the schools and the funds available. It is generally accepted that the elementary and rural schools and the normal schools of teachers colleges which train teachers for them, have been most responsive. It is naturally more difficult to change the attitudes or introduce new material into secondary or high-school grades and universities.

In recent years, as evidence of their interest, volunteer organizations have sponsored the establishment of a number of Nature Study Camps for teachers and leaders of youth groups, notably the Audubon Society, the Garden Club of America, State Garden Club Federations and the State Federation of Women's Clubs. Sometimes the camps have later become a part of a department of state colleges; a few were started by them.

NEW PROGRAMS FOR YOUTH GROUPS

The Girl Scouts have recently reorganized their program and increased the attention paid to nature study and conservation education, particularly in connection with their camping program. The Camp Fire Girls have adopted quite a remarkable and stimulating "far horizon" program of conservation activity and in 1938 completed its first nation-wide competition for community projects planned for accomplishment over a 25-year period.

A useful plan for study and work has been created in the CCC Camps and everyone will agree that the boys and men in these camps have not only learned but demonstrated to a nation-wide audience the importance of knowing how to do things and the value of doing them where it will do the most good. In some areas it would be helpful if those in charge of the publicity about this work would emphasize the reasons for and results of their undertakings, so using the chance for favorable radio or newspaper notice, to teach lessons in conservation.

The National Youth Administration outlined in 1936 a program in which the various state directors were urged "to learn from conservation agencies in the State, how to most effectively coöperate in their work."

CONSERVATION WEEKS

There are hundreds of other national, state and local activities, which indicate that many are trying to guide public opinion and develop helpful attitudes of mind. Conservation Weeks were first organized in eastern and then in the Pacific Coast States. The sponsoring and coöperating groups usually included the Garden Club of America, State Federations of Women's Clubs, State Federations of Garden Clubs, the Department of Education and the Department of Conservation or Natural Resources. They occur in the spring, on different dates, to suit local conditions. In most instances the annual Guide Book for Conservation Week was contributed by the volunteer agencies and dis-

tributed and used by the School Departments. California first attempted a state-wide organization which provided for participation of all Federal and state agencies and state-wide organizations interested in conservation. The California State Department of Education published the Teachers' Bulletin ("Source Material for Conservation Week," 1st Edition 1935, 2nd Edition 1936), and the State Committee printed and supplied the General Announcement, poster and Children's Leaflet. In Illinois, the State printed the official poster.

In some instances, a state program has been developed around a restricted field, such as the study and protection of birds or native flora, but usually the programs have attempted to show the very great scope, number and importance of conservation problems within the State, and so have encouraged the widest possible participation. The financing of printed material, particularly for the schools, libraries and state departments, should be borne increasingly by the States themselves, for with growing interest, the quantity is greater than individuals and organizations can adequately supply or afford.

National Wild Life Week has recently appeared as another agency which stimulates discussion of problems related to wild life. The attempt has properly been made to include subject matter, such as forest and water conservation, the purpose of which in part, is to preserve and protect wild life. The sale of bird and animal stamps designed by "Ding" Darling financed this movement in 1937. A Conservation Week and National Wild Life Week can be carried on either simultaneously or separately in the same State.

OCCASIONAL ACTIVITIES OF PUBLIC AGENCIES

The U. S. Forest Service, the National Park Service, Soil Conservation Service, Agricultural Extension Service, and Biological Survey all are trying to improve their approach to their special problems. Two years ago a talk was given before this conference on "Educational Opportunities in State Parks" (see paper by Ansel F. Hall, pages 277–282, American Planning & Civic Annual, 1937).

It is important to remember also that conservation practices should be taught or discussed repeatedly and in different places, not only in school but at home, on the playfield, in camp and particularly in public areas open for recreational purposes from beach to mountain. An example is the universal need for "good manners" that is, good habits and the proper attitude of mind with regard to burning matches and tobacco on the part of both children and adults. If anyone has been in the habit of throwing away cigarettes and matches when still lighted, ten to fifty times a day, he is not going to change the habit just because he is motoring along a rural highway or hunting and fishing in brush or wooded country. Laws, and warning signs are not protection enough. Education of the individual is necessary.

While we are discussing the ideal attitude of mind and way of living, it is not inappropriate to mention methods used to control the behavior of those using our recreation areas, where the practice of conservation principles must be enforced as well as taught. Some park executives have proved that if they have found some particular practices worth while, they will secure greater coöperation from the public if they explain or demonstrate how and why these practices are desirable. The advantage of combining control or discipline with reason is an effective argument for conservation education.

It is only realistic, however, to advise such "practical hints" as the digging of narrow roadside ditches to prevent auto invasion of beautiful meadows as in Yosemite Valley and elsewhere; and the use of such large or heavy tables, benches or waste-barrels that they cannot be readily hauled away in the trucks of appreciative park users (see Cook County Reservation, where Chicago picnickers are reported stronger than those in some sections of the country). The inexpensive photographs of park desecration, disorder or destruction caused by a group and mailed by the park superintendent, with a note, to teacher or group leader has resulted in the immediate improvement in the behavior of all the individuals in the group, including the leader's.

The confiscation of plant material in parks or on roads near certain vulnerable areas can be made into another effective conservation lesson. In certain areas many believe there should be more such supervised points of contact with week-end "nature lovers." In Southern California we can boast that few pick the protected Yucca blossoms, for with their stalk, they are 6 to 10 feet long, a little hard to hide, and our "educated public" openly razz the rash soul who tries to observe the Sabbath by bringing home one of these beautiful "Candles of Our Lord."

EDUCATIONAL MATERIAL

The number of pamphlets, charts and books, on conservation topics has recently increased rapidly. Many have been published by bureaus of the Federal Government, a smaller number by State departments and universities. Many organizations publish occasional bulletins and there are numerous periodicals now which include or feature articles and notes concerning our varied natural resources. Among the associations whose publications have rendered a great service in keeping different audiences informed and stimulating them to take a more active part in the conservation movement, to mention only a few of the more notable, are The American Planning & Civic Association, The National Association of Audubon Societies, The American Forestry Association and the American Nature Association. It is more than a coincidence that the word "American" appears so frequently in their names.

The most important message which can be brought to you is this: Those concerned with conservation education and nature study in

schools and in the youth groups, have one persistent plea which those in positions like yours should heed. They say: "First, give us more, more, more factual information and illustrated material. Help us to show how your work is related to everyday life, but please turn over your material to curriculum specialists who can best prepare it for teacher and pupil use." "Second, help us to find ways of making this material available at the least possible expense."

The demand for and use of visual education material is increasing rapidly. As more schools are equipped with moving picture machines and in the larger and more progressive cities and counties, staff members devote considerable time to collecting maps, charts, pictures, slides, pamphlets and even films. (The University of California Extension Division prepared a nineteen-page special catalog of "Films to Aid in the Conservation of Natural Resources," (Feb., 1918), in connection with the observance of California Conservation Week.)

The State and local planning boards are busy collecting data and compiling reports on many subjects of vital interest to citizens. It is important that planning agencies make available to departments of education, as well as others, summaries of factual material gathered and certain maps and charts compiled in connection with their studies of natural resources.

Taking Conservation into the Schools

JOHN C. CALDWELL, Educational Assistant, Tennessee Department of Conservation, Nashville, Tenn.

ABOUT fifteen years ago various conservation agencies in Tennessee began to realize the importance of education as a means of developing conservation attitudes. The forestry division of our State instructed its men many years ago to visit schools whenever possible and to interest teachers and students alike in the forestry program. In 1926 pressure was brought to bear on the legislature and a course in forestry and conservation was set up by law with a legally adopted textbook. Still later the educational trend had its effects in game and fish work and in 1935 the State Game and Fish Commission inaugurated a Division of Education to start work throughout the State among the schools. Less than a year and half ago all existing agencies in conservation in Tennessee were coördinated and a Department of Conservation was formed. One of the important administrative units of this new Department was an educational section. It became immediately the duty of this section of the Department to try to coördinate the educational activities carried on heretofore and mould them into a new program of conservation education. One of the first things that was attempted was a careful study of all the prior conservation education work in Tennessee and a study of similar programs of all the other States.

Immediately some very interesting facts became apparent. We soon saw that relatively little true educational work had been done either in our State or any other State. Instead of *conservation education*, the work that has been done to date might better be called *publicity*. We found, too, that in our State the teachers were not trained in any way to teach conservation. With few exceptions, they knew nothing of the importance of conservation and had no idea of the possibilities of teaching it. We found that most of the school work which had been done had been done independently of regularly constituted school authorities by individuals who happened to be interested and was generally more nature study than conservation. Conservation had been taught, it is true, in compliance with Tennessee law with an adopted textbook for ten years, but we found that this forced teaching had had but little beneficial results. A study of conservation education carried on by the other States showed these same failings. A few States have adopted conservation courses but they have made no provisions for adequate teacher training. It is worse than useless to expect a teacher, who knows nothing about conservation and whose interest in the subject has not been aroused, to teach the subject successfully.

Some 15 months ago we started a program of conservation education. The first and most important project we have undertaken is to see that conservation is properly taught in the schools of Tennessee, under the supervision of proper teaching authorities. We realized at once that teachers themselves must be trained and awakened before they can teach conservation. In Tennessee, county teachers' associations meet once a month during the school year, generally on Saturday, for educational programs. We first contacted the county superintendents of education in the 95 counties of the State, asking them to allow a department representative to meet at one or more of their institutes during the year and explain our conservation program and discuss with the teachers ideas relative to teaching conservation. During the last year we met with 37 such groups, contacting some 6,000 teachers, telling them about the conservation program of Tennessee and our desire to get proper conservation teaching in the schools. Immediately following each teachers' meeting, conservation department representatives visited in that same county, putting on programs at some five or ten schools in the county. In this way teachers obtain some little mass training but quite naturally we cannot expect to do much in one or two hours during the year. However, we consider this early contact of the greatest value in making our subsequent reception a favorable one.

Our second method of training teachers in the teaching of conservation is to obtain the introduction of conservation courses into the colleges and teacher training institutions of the State. During the past year we have succeeded in obtaining the introduction of such courses in seven of the leading colleges and universities of the State. Teachers must study

conservation if they are to teach it. Certainly an English teacher is not put into a school unless she has studied English. We have met with the professors selected to teach the courses and have helped them plan their work and have had department personnel meet with each class several times during the course and we attempt to supply them with factual material. We have a surprisingly heavy enrollment in these courses during this first year and the professors report widespread interest in conservation.

Next, after training the teachers of the State, we realize that the general public—fathers, mothers, members of the school board, and other citizens—must be sold on our conservation program if we are going to get successful teaching of conservation. With this in mind, we have traveled the State systematically from county to county, visiting schools, colleges, school board meetings—meetings of every variety—teaching the people the importance of conservation and telling of our efforts to obtain its teaching. After all it is the "patrons"—the people that send their children to school—who really run the school. In many cases curriculum content is investigated by these patrons If conservation is to be taught, these people must be behind it and pushing it.

Some months ago a twenty-foot trailer was bought and outfitted as a traveling conservation exhibit. The trailer is equipped with exhibits covering all phases of conservation—forestry products, minerals, mounted birds, and animal skins, charts, maps, graphs; it also contains excellent motion picture equipment and a powerful generator so that we can show motion pictures in any school no matter how far from electricity it may be situated. Since October, when this program started, we have scheduled some 340 meetings in nearly every county of the State. This figure may sound large, but much more impressive is the fact that during the same period it was necessary to turn down 1200 invitations for conservation speakers. That would certainly indicate the interest in this important subject.

The third phase of this part of our educational program, and one which naturally follows the first two mentioned, is to obtain the actual teaching of conservation in our schools. We believe that conservation is of great enough importance that it should be taught from the first to the twelfth grade in every school—city and county—negro and white. However, a study of the results of twelve years' teaching with an adopted course and textbook in the fifth grade, made us believe that there should be better methods to teach conservation than through courses enforced by law. The State Department of Education in Tennessee has for the last five years been doing extensive work in the improvement of the existing curriculum—in an effort to get away from the traditional teaching method where the teacher was a slave to the text. In the traditional old-fashioned school of America the textbook is almost as important as the teacher. Most teachers follow the textbook page by page with no

variation. A text is too limited in the amount of suitable material and it is too didactic and pre-organized. Even the existent flood of improved textbooks is insufficient to serve the need of the child who is developing as he should. To meet this problem, the Department of Education has developed in our State a method of instruction that has been developed in several other States—a system of teaching by the use of *units of work*, based on actual condition and experience. A teaching unit which makes use of local conditions and local problems—it is based upon real and meaningful situation so that the formal tools of reading, writing, and arithmetic are not learned in isolation. This does not mean that these basic principles are not learned. They are introduced as they are needed and there is ample evidence that they are learned more readily and permanently in this way—that is through application. In Tennessee we are seeking to teach conservation by the use of teaching units which may be integrated with every existing course in the present curriculum in such a way that the formal tools of learning are acquired through the means of conservation as a general theme.

In connection with the larger teachers' colleges of the State, there are training schools for practice teachers. Trial teaching units are being prepared by teachers and then used in these training schools. Other teachers have prepared teaching units during summer months at teachers' colleges and then applied their work during the school year in their particular schools. After they have then tried these units, they are taken by teaching authorities into the curriculum "laboratories" of our three largest teachers' colleges where they are studied and discussed and put into better shape. During this present summer, fundamental—or "key" units—are being prepared in the largest curriculum laboratory of the State—at Peabody Teachers' College. The best known teaching authorities of this, and several other States, will put them into best possible shape and they will be distributed in printed form this fall to every teacher in Tennessee. At another of our teachers' colleges, the one situated in East Tennessee, the whole theme and discussion of work during the summer months will be conservation and conservation teaching. Some 150 selected teachers will go over all available teaching material in an effort to produce better teaching units for use in the schools. Conservation Department personnel meet with these groups at every opportunity. We do not tell them *how* to teach conservation but we tell them what we as conservation experts know should be taught. In this way we are assured that the right kind of subject matter is being used. In an effort to increase interest among teachers in the use of teaching units, we have selected 300 schools, evenly distributed throughout the State, where conservation teaching by the unit method will be used during the coming year in every grade and in every course. These schools will be demonstration schools—schools where proper conservation teaching is demonstrated.

State Park Architecture

ALBERT H. GOOD, Architectural Consultant, National Park Service

IT WOULD have been helpful if Mr. Gallup might have polled this gathering well in advance. A position on "State Park Architecture" could then be taken with smug assurance. For, if most of you cherish that outworn notion that *all* structures—regardless of purpose and excellence—are alien and intrusive in *all* natural park areas—irrespective of degree of scenic, scientific, and historical endowment, it would be expedient to render the customary lip service.

After all, a brief, conforming "God save the king" for the creaking credo would be the easy thing to do. There is, however, a haunting suspicion that to give it a cheery slap on the back would not be accepted as enough. One is probably expected instead to lift the moribund idea tenderly from its sick bed, clothe it in colorful phrase, rouge its shriveled cheeks with synonym, twine a bright verbal garland in its toupee and insist once again that the down payment on a shroud was money thrown away.

Such a feat of superficial rejuvenation involves a technique for which I have no hand and a belief in which I have no heart. The only alternative is to cry, "The king is dead; long live the king," and face the firing squad, if need be.

Burke, by way of the thesaurus that is a collaborator on this paper says, "Our antagonist is our helper." Here is classic justification for the dissenter—and tremendously reassuring. I rush with eagerness and delight to render all possible aid to friends of the Model-T notion about park structures, by being radical, disputatious, and generally disagreeable in what follows.

During the formative years of the natural park concept, its sponsors raced against time and threatened exploitation to preserve areas of outstanding scenic and scientific interest. Among the superlative sites early dedicated to the natural park idea were the incomparable Valley of Yosemite and the wondrous Canyons of the Yellowstone and the Colorado. Resentment against buildings invading such scenic splendor was not long developing. It was there that man must have sensed that in the midst of primary grandeur his best-intentioned structural efforts reached an all-time high for incongruity; that structures, however well designed, could never contribute to the beauty, but only to the use, of a natural park of real distinction; and that only the most persistent demands for a facility should trap him into clowning with hammer and saw in unspoiled wilderness.

He promptly and wisely laid down the principle that structures were alien and intrusive in natural areas. Applied to the areas with which his preservational interest was first concerned, and which became the

jewels of the National Park System, this formula was perfectly appropriate. It nourished the budding park idea and was a favorable and protective influence in its flowering. General acceptance of the principle over the years has so held in check the building of structures to a desecration of top-flight Nature that few persons have been moved to challenge the statement a half truth, standing very much in need of restatement in the light of today's many-sided park concept.

All Nature is not outstanding, inspiring, breath-taking. The really magnificent areas have stature because the comparatively few acres they involve are in sharp contrast with hundreds of thousands of relatively unexciting others. The scenic endowment of some broad, densely populated sections of the land is definitely subsuperlative, even subaverage.

Once aware of all this, the sponsors of the natural park movement could not long remain preoccupied with top-flight Nature exclusively. The natural park idea was destined for a truly liberal evolution, influenced by such weighing factors as distribution of population, development of the automobile, increase of leisure time, and tardy realization that the human crop is important among conservational responsibilities of parks.

The fact that superlative Nature is non-existent near concentrations of five to ten million people happily has not resulted in these populations being denied such recreational and inspirational benefits as subaverage Nature can offer. It has been wisely reasoned that there is more nourishment in half a loaf in the larder than a full loaf beyond the horizon—or no loaf at all. Many park preserves have come into being which cannot boast the highest peak or deepest canyon, bluest lake or tallest tree, but do succeed in delivering (f.o.b. metropolitan centers) hills and valleys to pass for superlative in contrast with tenement walls, and swimming, sun, and shade to seem heaven-sent to youth whose wading pools have been rain-flooded gutters of drab city streets.

Tracts of land, admittedly limited or even lacking in natural interest, yet highly desirable by virtue of location, need, and every other influencing factor, now bloom attractively on every side to benefit millions. It is inexact to term these parks, in the accepted denotation of the word —they are reserves for recreation. More often than not their natural setting is only that contrast-affording Nature which makes other areas outstanding. Does such a background warrant the "no dogs allowed" attitude toward structures that obtains where Nature plays the principal role? Should not structures, on the contrary, be welcomed to a fulfilment of recreational potentialities and needs and a bolstering-up of commonplace or ravaged Nature? Is a charge of trespass justified? It seems reasonable to assert that in just the degree natural beauty is lacking in a park area, useful structures have legitimate place.

Mr. "Bobs" Mann says of the popular curved earthen bobsled runs

he has built in the Cook County Forest Preserve District, "The thrills vary as the square of the curves." He does not supply any slide-rule calculations to prove his discovery—just leans heavily on the sublime gullibility of the park- and recreation-minded. His success encourages me to be equally disingenuous, do some postulating myself, and resent all requests for supporting calculations. Here it is: *The justification for structures varies inversely as Nature's endowment of the park area.* Which is to say: *Deficiency of natural values in parks can only be compensated for by introducing other values, recreational in character and very generally dependent on structures.* It is therefore contended that park and recreation architecture, outside certain sacrosanct areas, need not cringe before a blanket indictment for "unlawful entry."

This happy idea of rendering service by antagonizing really has great possibilities. Some helpful irritation might be applied to those of you whose hostility to construction insists that even the most essential structures are unthinkable in parks unless they are subordinated to the landscape setting—be that good, bad, or indifferent. Now where Nature is Grade A—Certified, perhaps recreation architecture is properly backed off into some borrow pit or burned-over area where it can be made to look meek and forbearant. But why should settings that are utterly commonplace (and many such are being developed and called parks or recreational reserves)—why should these constitute a "ceiling" for the architecture of buildings that are indispensable if the very establishment of the area is ever to be justified? Isn't it time for park and recreation architecture to cease being pathetically humble and self-conscious in settings of convalescent or synthetic Nature? Instead, should it not frequently step right out in front and make up for scenic deficiencies by supplying all the forthright, imaginative beauty it can contribute?

Surely the obligation rests on anyone striving to be helpfully antagonistic to spread the benefits at his command quite impartially. An architect, especially, would be open to the charge of prejudice if he refused to be as hotly helpful as a mustard plaster to those who believe that the dreadful curse on park buildings is miraculously lifted when landscape architects design them. Possibly the bona fide architect's sublime ignorance of plant materials and road alignment logically disqualified him for designing park buildings, where the landscape architect's equivalently amateur knowledge of building materials and truss forms is no handicap. It always gets very complicated when references to the architect and the landscape architect must be made in the same breath. One gropes for a descriptive adjective appropriate to the former which might truly separate the sheep from the goats. "Bona fide" isn't exactly sporting; "common" applied to a disappearing species is certainly inaccurate; and to call the architect "the plain, garden variety" is only confusion worse confounded, in the circumstances. I think that to dub him the "simple" architect is very appropriate, for simple indeed is the

dull fellow if he "amens" the loose logic behind the landscape architect's taking over the designing of buildings in parks.

There is always a formidable bloc in any park and recreation forum that clings to the belief that "age cannot wither or custom stale" log construction, as the supreme expression of park architecture. May its collective toes be trampled on to its benefit. To be sure, there are parks wherein reproduction of pioneer construction will always be appropriate, —wherever local tradition is the primary theme, as at Spring Mill, Indiana, and New Salem, Illinois, and wherever in forested States the timber stands remain so abundant that structures built of large logs will not appear to have been a factor of depletion. But it must come to pass that structures employing logs of suitably generous size in settings of small second-growth trees, as well as all construction that resorts to a use of spindling logs, will be seen and chuckled over for the stuff and nonsense that they are. Of course, there will be diehards, lacking in humor and other senses, who will solemnly continue to re-create log cabins of the pioneer era in deforested areas, or within sight and sound of metropolitan areas and gigantic power dams of the machine age. They are the quaint theorists who must feel pain because the Bear Mountain Bridge, joining two high, tree-clad river banks, was not fashioned of logs, pegged together.

The public prints lately proclaimed that a swing band leader had been moved to streamline the National Anthem so completely that a copyright was granted on the new version. If this foreshadows a drastic reshaping of familiar and sacred things to suit the modern mood, let's set about hauling down from the attic the frayed and faded theory of park structures. Let us dust off and examine it. It may be that by sewing a new coat on the old buttons we shall contrive something to fit the diverse needs of parks today.

State Park Organizations: The various kinds: Their good and bad points

R. A. VETTER, Assistant Attorney, National Park Service

STATE PARK legislation of varying character, but representing in the aggregate a considerable mass of laws, has been enacted during the past few years. Underlying much of this legislation has been a search for the best form of park organization. Other measures have been designed to strengthen and extend existing agencies.

Notwithstanding this wave of legislative activity, park legislation has in no sense become uniform. In the strictest sense, uniformity would mean that every State employ identical legislation, identically administered, without regard to local conditions, needs and precedents. Manifestly, uniformity in so rigorous a sense is neither possible nor

desirable. Viewed at large, however, it is significant to observe that certain principles, however expressed, are to be found in so much of the recent legislation as to indicate definite trends.

Existing park organizations may be classified: (1) The departmental form, generally designated the conservation department, or name of similar import, in which are centered all or a number of conservation activities, including parks; (2) the board or commission form, in which are centered two or more conservation activities, including parks. These are designated by various names:—the forestry board, the fish and game commission, the park and forestry commission, etc.; (3) the board or commission concerned with parks only. While each of these forms has its champions and its merits, the trend of recent legislation favors the department form.

In turn, the department form may be further classified as follows: (a) Those with a one-man director or commissioner; (b) those with an executive board or commission; and (c) those with an advisory board or commission. Recent legislation favors the one-man director or commissioner; the executive board or commission is second, and the advisory board is running a poor third.

Before leaving the subject of organization, it may be of interest to observe that while a number of the States have switched from the board or commission form, as represented by (2) and (3) above, in no instance has the department form been abandoned once adopted.

Regardless of the form of organization adopted, the paramount factor in the advancement of its functions is the caliber of the individual or individuals who man the organization. No administrative arrangement has yet been devised whose purposes cannot be ruined by disinterested, incompetent, or subservient officers in the key positions. The tendency of recent legislation is to take cognizance of this fact, by requiring that all appointees and other personnel be selected solely on the basis of a knowledge of and interest in the activities of the organization, and thus discouraging, if not eliminating, partisan or personal favoritism.

By the same token, provision for ex-officio incumbents is found less frequently. Park organizations composed of or dominated by ex-officio members whose primary responsibilities and interests are foreign to park and recreational matters, is partisanship in its worst form.

There is also a tendency to provide that appointees may be either men or women, a subtle and belated recognition that women are not only interested in park and recreational matters, but are equally qualified for service in an administrative capacity.

There is a definite tendency toward the elevation of park standards. In general, this takes the form of a requirement that areas must possess distinctive scenic and recreational values, or at least some scenic characteristics and unusual recreational possibilities. Areas of historic, archeological, or scientific interest are now generally recognized as proper

for inclusion in the park system, especially when such elements are linked with recreational possibilities.

Where all or a number of conservation activities, including parks, are under unified control, the tendency is to create separate divisions for each activity. This provision is generally accompanied by a requirement that trained, experienced and able officers head these divisions. Also, there is a growing recognition that parks and forests have divergent major objectives, and to require that areas be classified and administered as one or the other.

Unification of control and administration of all parks and recreational areas is making noticeable progress. But much remains to be done in this respect. There are now state park organizations with no park or recreational areas to administer, such areas being under the control of separate and independent commissions.

The inclusion of parkways in the park system is growing in favor.

There is a growing tendency to recognize that planned and directed recreational activities have an appropriate place in a well-rounded park program.

Another trend is toward better coördination and more active cooperation between the park organization and other agencies—national, regional, state and local—engaged in similar activities. Parallel legislation is found in enabling acts authorizing cities, counties and other political units similarly to coöperate. Not infrequently these local units are authorized to contribute both land and money for the benefit of the state park system.

Significant as these trends are, it is equally significant to note that they represent little that is new in park legislation. Their genesis is to be found in the earlier park laws. In a sense, States which have pioneered in park legislation may be regarded as laboratories in which these provisions have been tested and their worth demonstrated by time and experience. Their adoption by States which have more recently entered the state park field lends reality to this comparison, and is an enduring compliment to the early exponents of park and recreation legislation.

In conclusion, and taking the country as a whole, it may be said that park legislation has made definite progress. There are, of course, States which do not possess adequate park laws. This, however, is not altogether the fault of the legislators, but may be attributed to a passive interest in state parks within these States. In fairness to the legislative bodies, it should be said that their apparent willingness to enact comprehensive park measures has been one of the most encouraging aspects of the state park movement. But legislation is largely a reflection of dominant public opinion. When a more active popular interest in parks and recreations within these States is manifested, we may confidently anticipate that appropriate legislative action will follow.

A Park Administrator on State Park Landscape Architecture

D. N. GRAVES, Secretary, State Game and Fish Commission, Little Rock, Ark.

AS a whole, I believe state park landscape architecture is now superior to that formerly accepted as the criterion for national parks. This statement can be verified by visits to state parks in States all over this great Nation of ours, and also by careful study of state park plans, and comparing them with those of our national parks.

A study of state park landscape architecture immediately brings us face to face with the state park landscape architects who have been responsible for these excellent results. My criticism is not of the results that have been obtained, for, in almost all instances, the results are very desirable. The manner in which these results have been obtained, is, in entirely too many instances, enough to drive a park administrator to the verge of distraction. Lack of experience has too often caused our landscape architects to resort to the well-known "trial and error" method of treating a given problem. The resulting waste of man days and materials has no doubt been responsible for these gray hairs now generously sprinkled among my erstwhile "raven locks." I have sometimes thought that surely the old copy-book motto: "If at first you don't succeed, try, try again," must have been coined after watching progress on some of our projects.

A park administrator, while engaged in park construction, must carefully weigh the need and usefulness of a given project against its cost, for all of us are vitally interested in obtaining the maximum of values from available funds. I believe our state park landscape architects have been more extravagant with man days of labor than have any other group of our technical personnel. This extravagance, caused by a lack of experience, is the result of a condition, and is not to be blamed on individuals. The ultimate results are to be credited to the excellent assistance given our field landscape architects by more experienced men from our Regional offices. Prior to the inception of the ECW program in 1933, the opportunity for a landscape architect to become experienced in park landscape architecture was extremely limited. This condition did not exist to such a great extent with regard to our engineers and architects. This park experience was gained at a tremendous cost of wasted labor. One great and lasting benefit that has accrued from the ECW program is the training of an adequate personnel in park building.

On one certain occasion I recall checking into the cost of constructing a barbecue pit on one of our state parks. Imagine my surprise when I learned that solid rock has been excavated to a depth of 18 inches, only to provide for a concrete base for the stone structure. The base was, as I recall, approximately 5 feet by 18 feet, some twenty sacks of cement had been used, to say nothing of the labor of excavating the rock. A few

months later I was relieved when I learned of a landscape architect in one of our national parks, who had likewise ordered 12 inches of rock excavation to provide room for a concrete base for some rubble gutters. In both these cases the ultimate result and appearance left nothing to be desired.

There has often been a warfare waged by our engineers, our architects and our project superintendents on the one side and our landscape architects on the other. In most cases all concerned were at fault, for most problems over which discord has occurred could have been peacefully settled by compromise if our technical men had made an effort to see the other fellow's viewpoint. Good park landscape architecture consists of treating problems, be they engineering or architectural, in a manner that will not impair the use for which they were designed, but that will insure their successful and lasting use, and at the same time will make the project fit unobtrusively into its natural setting.

Different individuals will treat any given problem in different ways, any one of which may be equally desirable. The landscape treatment of such a problem is planned and subsequently executed by one landscape architect, in a manner suggested by his feeling of what is proper for that particular problem. I know of cases where such a project has been completely finished, only to be obliterated and done in an entirely different manner, due to personnel changes and to differences of opinions of some late comer who happens to have more authority than his predecessor. Frequently the delay and expense of these changes are such that from the viewpoint of the administrator it would have been better never to have begun the project in the first place.

Prompted by a sense of fairness, I want you to know that by no means have my observations of extravagance been limited exclusively to our landscape architects. In this connection I am reminded of the one classic example of wasted funds that I will always remember. The gasoline, oil and maintenance account of one of my camps ran faster than a streamlined train. An investigation revealed the fact that the project superintendent, who, by the way, was an engineer, had issued an order that the oil in motors of all his trucks must be changed each Friday evening at the conclusion of the day's work. This order had been carefully carried out for a number of weeks without regard to the amount of mileage made by the truck that week. I suppose his order had been prompted by the well-accepted rule of washing on Monday, eating fish on Friday and bathing each Saturday night.

It has been said landscape architecture is the art of arranging land for human use with a controlling regard for beauty. This definition is to my mind the best one I have ever heard. As our landscape architects have become more experienced in state park work it has naturally resulted that the above definition has been carried out with much less difficulty than was experienced in the early days of park development.

State Park Engineering

CHARLES G. ESTES, Chief Construction Engineer, Forest Preserve District of Cook County, Illinois

STATE park engineering can rightfully be placed in a class by itself, the same as mechanical engineering, electrical engineering, or civil engineering, in that it embraces this entire field, although in most cases it is more closely allied with civil engineering. It goes still farther. Landscape architecture has been defined as "Primarily a fine art, and as such its most important function is to create and preserve beauty in the surroundings of human habitations and in the broader natural scenery of the country; but it is also concerned with promoting the comfort, convenience and health of city population which have scanty access to rural scenery." That definition also just about fits the subject of state park engineering as I see it, so therefore, I would insert the name of landscape engineering into the old line group of mechanical, electrical, and civil and then a student with an academic training in landscape engineering would be properly equipped to become a state park engineer.

The successful state park engineer, granting the fact that he has the proper knowledge of engineering book information and how to apply it, must possess a definite sympathetic feeling for the landscape architect and his work. He must possess this naturally or gain it through experience. Other than the consideration of plant life, their species and life zones, there should be no marked difference in the approach to park work by the engineer or the landscape architect. An engineer should be capable of maintaining the proper balance of the artificial with the natural. He alone who is modest enough to subordinate his structures and construction to the landscape will in the end be rewarded with the additional touch that nature always gives to his work. The state park engineer must know something about the habits of trees, their root structures and what he can do in the way of making surface and underground changes among them. He must appreciate the value of trees and think in terms of them continually in order that he may not become careless and destroy what it took many years to develop. He must be alert to all the possibilities that natural tree arrangements offer him for creating effect in his road layouts, bridge installations and the like. He should learn the value of vistas and the value of color in his completed picture, if his work is to be high grade and acceptable.

On the other hand, and I think it appropriate to inject it into this talk, the landscape architect should know a portion of the technical answers required in park engineering problems and by all means he should reconcile his esthetic desires with the more practical thoughts of the engineer. Without any desire to detract from the landscape architects I think it is quite common that they have been guilty of a tendency to maintain too much of the artistic approach to things in our work where

some old-fashioned thinking with the engineer would be of great help. I should not be misunderstood here because I am a great champion of their cause.

It is, no doubt, true that most of the engineers now in state park work received their former experience in the highway field or in municipal engineering work. There is a very close comparison in a great deal of the work performed by the state park engineer and the highway engineer. The state park engineer can lead the way in directing the highway engineer out of the darkness and show him the dawn of a new day in so far as protection and consideration of the natural landscape is involved in his new developments. What has been the practice in the highway field for the past 25 years? Standardization of most everything that has been done. The plans for culverts and bridges are generally filed away in mail-order house style and you could not get a standard headwall length changed under a court order even though a 100-year oak be only slightly in the way. Highway cut and fill slopes have been constructed with the old 1½-to-1 or 2-to-1 ratios for so many years that even the universities have accepted them and taught them to the students. What have been the results? Erosion, slides, washouts and ugly scars. It has been only in the last few years that any marked trend toward flatter slopes, sodding and planting has developed on the highways. In Illinois, where a great deal of promotional work has been done by Robert Kingery, General Manager of the Chicago Regional Planning Commission, the effects of landscape engineering on the highways can be noticed.

The highway department can learn about the landscape from the state park engineer.

In discussing a few typical problems in state park engineering I will naturally be guided by those in our own reservation of 35,000 acres in Cook County. I think our problems are typical of those in most any state park property. We have hills, valleys, meadows, lakes and many acres of trees. Being within 30 minutes' ride of over 4,000,000 people, the properties are subjected to a heavy automobile load. This leads to a road and parking space construction program of great magnitude. On last inventory over 1,000,000 square yards of improved surfaces were accounted for. These surfaces have had a low maintenance cost.

The state park road is generally the first thing that impresses the visitor. It is the shirt front on Nature's body. Visitors nowadays are so used to comfortable riding on public highways that unless the same degree of comfort is furnished in our parks, Mr. and Mrs. Taxpayer may not appreciate what your park may have to offer otherwise.

A park road is a cheap investment when constructed properly. If it is not constructed properly it becomes an expensive maintenance burden. Assuming that we all prefer the gravel or macadam or improved asphalt surfaces, there are three things to consider. One, ground water table control by strategically located tile lines; two, a properly stabilized

gravel or macadam material with correct clay content for binding, and, three, cross-sections and longitudinal gradients. When using the blacktop surface it is only as good as its base. With a good base the surface will be successful only when a rigid control has been maintained, by the engineer, over the asphalt material.

Continuate with roads and parking areas, in our efforts to control the automobile, are barriers. Natural planting is obviously most desirable. Anything other than that must be designed and installed so it will be the least conspicuous. A low stone masonry or concrete curb is desirable for low maintenance cost; while wood log rail barrier is effective as barrier, it is expensive to maintain. This type of barrier is fast becoming one of the curses on state park landscapes. More abuses of design proportions and installations have occurred with this sort of thing than any other form of park improvement. Now, even the WPA is going wild with it.

In the early days we installed considerable of it. It was set low using 6-inch rails and 10-inch posts. The right proportions. We are fast eliminating it where possible.

Bridges and buildings, which we all like to play with, are mostly done in stone. Here the state park engineer must design best to utilize and assume the most pleasing effect with the type of building stone material at hand. We cannot create in northern Illinois with stratified limestone the same effect that you might prefer which exists on a building or bridge in New York State where different stone formations exist. Crudity in stone masonry pattern and appearance is what most park people like, in that it is representative of the pioneer product; however, the state park engineer must build for permanence and apply certain knowledge gleaned, since the now tottering pioneer stone structures were built. This is why the Cook County practice of using a random rubble pattern with stratified limestone, approaching the ashler, has been adopted. Our work may appear a bit meticulous, nevertheless, it is built to stay and is admired, generally, by all.

State park engineering should be recognized by the engineering schools and they should provide a place for its teachings. The engineer should be graduated with more knowledge of landscape preservation. Give the engineering student something to think about other than transit lines, T squares and triangles.

The National Conference on State Parks has an opportunity here to perform a much-needed promotional service. State park engineering is a medium through which the training, particularly, of the civil engineer may be vastly broadened.

What has the state park to offer the engineer? It offers contentment in one's work. That is about the best state of mind that one could expect to attain.

That is what state park engineering has done for me.

Problems of a State Park Superintendent

HAROLD W. LATHROP, Director, Minnesota Division of State Parks, Minneapolis, Minn.

A STATE PARK superintendent should have a pleasing personality as he must continually meet park visitors. Many come from out of State, and do not have contact with any other state employee.

There should be a definite requirement that the superintendent have some experience in the artisan trades. The best superintendent would be a jack of all trades, but one who realizes the value of specialized artisans when necessary.

The fiscal procedure requires that a man have had some experience in letter and report writing and simple bookkeeping, the latter because he must control his expenditures against the funds budgeted. In parks where revenue-producing facilities are state operated, he must be able to check receipts and determine the probable demand of merchandise for re-sale.

He must be a conservationist, because the prime purpose of operating state parks is to permit the wise use of Nature's gifts of flora and fauna for the benefit of mankind; but where the human element is injected into such areas, there should be a balance maintained as to how much intrusion should be permitted for the benefit of park visitors against the despoliation of God's handiwork.

The problems of a state park superintendent are:

1. Land and water protection
2. Wildlife conservation
3. Maintenance and improvements
4. Operation
5. Fiscal procedure

A state park superintendent must be constantly on the alert for fire hazards, which might develop into disastrous conflagrations. He must guard against trespassing by owners of adjacent or contiguous private land, for the removal of timber, filling material, and, yes, even sand and gravel. He is confronted with the problem of keeping up fences to prevent stock running over the park area.

There is the problem of retaining uniform water levels, being aware of the effect of pollution or the diversion or retention of waters or streams flowing into the park lakes. This is a problem in the northern section of Minnesota. In many cases dams have been constructed and private property owners have retarded a normal flow of water courses for their own benefit. This during periods of closure, leaves the stream-bed running through the park practically dry or causes the lake-levels to drop. Thus, a good superintendent is constantly on the alert for the protection of the state park land and waters.

Wildlife conservation presents the problem of assisting the game

wardens, operating under a separate division, to see that the game laws are abided by. The re-stocking of the fish species is a seasonal problem, for the park visitors are very instrumental in the depletion of fish life, which must be balanced by restocking. He must have sufficient knowledge of the lakes and their food value so that he can be sure the proper species are planted in lakes suitable for each.

Except in the extremely large parks, the onslaught of civilization has definitely thrown out of balance the wildlife status of the parks. The predators for which bounties are paid are permitted to be removed. An over-population of certain species presents a problem, because of insufficient natural food supply, which must be met by artificial feeding, to eliminate complete browsing off of the seedlings and young tree growth which must eventually replace the matured timber.

It is a problem to make the public realize that the native flora, existing along the trails, are to be seen and not picked. Periodic inspection along the trails is necessary, to check the condition of trees, which might create too great a hazard because of rot or wind breaks.

A park superintendent is confronted with the problem of diseased trees, which may endanger the sound trees or the public. A balance must be retained from the human as well as the wildlife standpoint, and the justification for any action based on comparative values.

Maintenance of facilities and areas which the public use, if properly carried out, should assist materially in conserving the natural sections of the parks. The maintenance of park roads is a problem which requires constant vigilance during the heavy use season, but which must also be done in off-seasons. In our State, we are confronted with a serious snow-removal problem. If our park roads were paved with concrete, the maintenance problem would be much simpler, but they would be so much in conflict with the naturalness of the areas, that I am partial to well-maintained oiled or black-top roads, because they are less intrusive. The roadside ditch and backslopes must be sufficiently maintained so as not to become a fire hazard, because of thrown cigarette stubs. A constant checking of culverts and bridges is another problem.

Maintenance of firebreaks is necessary to assure ingress in case of an emergency. Gates to fire trails are often opened by someone desiring to drive farther into the wilderness.

There is the problem of maintaining the guard rail, so that it may satisfactorily serve its purpose. The parking areas must be graded occasionally, especially after heavy rains, if rutting occurs.

One of the most important maintenance problems is the provision of a potable and adequate water-supply at all times. During the last few years, under the various Federal relief programs, we have been fortunate in establishing gravity systems and in so doing have eliminated the old hand pump repairing, which was almost constant, but power pumps need periodic checking. Where springs exist, a constant check must be

made on the possibility of contamination by ground or surface water. The use of springs as a water-supply is discouraged.

The cleanliness of the various use areas, the allocation of picnic tables in each, the repair of stone fireplaces, the cleanliness of rest rooms and shelters, the safety of docks and beaches, adequate firewood supply, and the proper functioning of sewage-disposal systems all become major problems unless they are checked often.

If the maintenance crew of a park is sufficiently large, the problems are few, for each man is charged with certain responsibility, and an occasional check by the superintendent will eliminate any serious problem of unsatisfactory maintenance.

No doubt many park superintendents throughout the country are worrying about the future of maintenance of the many additional park improvements received under the CCC and WPA programs, especially where additional personnel will be difficult to obtain. Consideration should be given the superintendent's ideas as to the need for certain improvements. The technician often does not give sufficient thought for the man held responsible for the operation.

We make our park superintendents responsible for any state participation given to Federal relief projects, and in a number of our smaller parks hold them responsible for directing improvement work.

The operation of facilities presents a definite problem to the Minnesota state park superintendents. We have found that better service is rendered the public and the State receives more revenue under a system of state-operated facilities, rather than under lease. Such operations include concessions, campgrounds, boat rentals, bathhouses and bathing beaches. In only a few of the smaller parks are the concession privileges leased to private individuals.

The operation of boats, which in almost every case is insufficient to meet park demands, must be assigned fairly during such times and that no such thing as reserving boats for privileged parties be permitted.

He must see that the operation of the bathhouse is properly carried out, that towels and suits rented are clean and that every effort is made to eliminate misuse of the checking and dressing room privileges. It is a problem to determine the periods when life guards should be assigned to duty, primarily when funds do not permit full-time service.

Many of the problems of a superintendent can be delegated to capable employees, but the superintendent must assume the problem of continual checking of the services rendered.

The operation of pumps, electric generators and telephone lines requires mechanical agility, and the superintendent who has some knowledge of such might avert a more serious problem.

The fiscal procedure of a state park superintendent can be lightened considerably and be less of a problem if it is held to the simple forms. The park superintendent knows the extent of funds with which he has to

work and he is held responsible for his expenditures within this amount. All purchases are controlled under a system of purchase authorities, by the state office, which encumbers each at the time on issuance against the budget item to which it properly belongs, and at such time that certain budget items are over-encumbered, we hold the park superintendent responsible for cutting down his expenditures on other budget items to that extent. There are also records for concession operation, which are very simple, whereby all material received is entered on forms at the resale value. Periodic inventories are made by our auditors.

Boat rental reports are made daily from numbered tickets, which are punched for the duration boats are used within every hour periods, and a charge is made accordingly.

The camping privileges must be accounted for according to the type of equipment, whether automobile and tent, auto and trailer, which are punched in specific places on the registration tag, one-half of which is retained by the visitor and one by the operator.

People in park work are expected to be working the hardest when the rest of the citizenry are vacationing, but although the problems are many, there is a personal satisfaction in seeing others receiving enjoyment from our efforts, which is a worthwhile way of looking at our jobs.

Elements of a Good State Park Plan

S. HERBERT HARE, Landscape Architect, Kansas City, Mo.

WITH the sudden and rather miraculous growth of interest in state planning, a system of state parks is now recognized as one of the important elements in a state plan, and closely related to other problems of state-wide planning, such as land use, water conservation, and highways. As in the case of other phases of city, county and state planning or development, the first essential is a satisfactory legal, financial, and administrative status. If parks do not have a proper standing under state laws, their life and usefulness will be uncertain. If they depend for support on funds from some related department such as from fish and game licenses, there will always be jealousy on the part of hunters, fishermen or others supplying such funds, over their diversion to park use. If the administration of the parks is assigned to some department or board having only an incidental interest in them, they will soon become the "step-child" of that department. It seems much better to include state parks as a department or division under a conservation commission, with definite allocation of funds.

While a repetition of what has often been said before, perhaps in somewhat different words, the general functions of a state park system might be outlined as follows:

1. To preserve unspoiled for present and future generations the best examples of the characteristic scenery of the State—the hills, mountains, streams, springs,

woodland, prairie, swamps or ledges—as well as the flora and fauna which are an integral part of that scenery.

2. To provide the types of recreation which are normally based on the enjoyment of natural scenery such as picnicking, camping, boating, swimming, riding, hiking, and nature study; rather than the more sophisticated types of recreation requiring artificial facilities and a high degree of maintenance, as tennis or golf, which are more properly suited to city parks.

3. To preserve areas of special historical, geological, botanical or archeological interest, such as the homes or birthplaces of famous men, old inns, mills or public buildings, battlefields, fine specimens or groves of trees, Indian mounds or villages, unusual rock outcrops or fossil remains of extinct animals.

The "state park" should be to the State what the superb areas of primitive scenery, known as "national parks" are to the Nation. While it is difficult to fix a minimum, areas to be classed as "state parks" should usually include 500 to 1,000 acres and preferably more, at least enough to make the scenic unit self-contained.

The boundaries of state parks should have careful consideration so that topographical units of scenery are included. Also in the case of lakes one of the most common mistakes is failure to include an adequate border of land around the water to provide space both for reasonable use and scenic protection. At least three to four times as much land as water area is usually needed to accomplish this.

Historical, geological, botanical or archeological areas might be classed as "preserves." These would be comparable to the so-called monuments under the National Park Service. The extent of these properties, as well as the recreational value incidental to their primary use, would be subject to local conditions. Care should be taken that they will not be overrun or worn out by attendance out of proportion to the area and facilities provided.

The growing importance of turn-out places along main highways justifies "roadside parks" as a separate classification. These can be at scenic points and can provide for picnicking, or even camping if proper sanitary facilities and supervision is provided. The area may vary from a slight widening of the right-of-way to several acres. There is a serious question whether, in the interest of efficiency and economy, such areas should be placed under the control of the state highway department or under the state park department. The state highway department can police them more readily, but may not have as sympathetic or esthetic a point of view in their development or maintenance. Such parks are usually best located at stream crossings or at high points having a scenic outlook.

The value of "parkways" as a part of the state park system cannot be over-emphasized. Pleasure driving is one of the most common forms of recreation, but the commercialization of the main highways has made them unsuitable for this purpose. The roadway of such a parkway need not have quite as high standard of gradient or curvature as the main

highways, but should be bordered by a strip of land of sufficient width to preserve the natural scenery and prevent commercial intrusions. This width may vary from 300 or 400 feet to 1,000 feet or more, depending on topographical conditions. The Federal Government is setting an ambitious example in these parkways and several States are considering similar developments. States which have a continuity of good scenery along river valleys or ranges of hills can most easily develop parkways.

Probably "sanctuaries" is the best term for areas devoted to the preservation of wildlife. These may be separate areas set aside for this purpose, perhaps under some related department, without provision for visitors or they may involve an incidental use in portions of the larger state parks. All state parks, parkways and preserves should have some value in wildlife protection and preservation.

It seems hardly necessary to say that the planning of a comprehensive state park system should be based on data as to physical, social and economic conditions in the State. These data should usually include growth, distribution, trends and composition of the population; historical and archeological facts and location of areas; physiography and geology; climate and precipitation; present and recommended land use and problem areas; land values and tax delinquency; and volume of traffic.

What Does the Average Man Expect to Find and Do in a State Park?

PAUL V. BROWN, Associate Regional Director, Region II, Omaha, Neb.

THAT this subject was assigned me on a moment's notice—almost as an after-thought—is indicative of something significant. It is proof that park people in general are backwardly advancing. That is, they are progressing, perhaps, but like the crayfish their hind ends are foremost and their eyes are focused on a receding landscape.

Have I made myself clear? We have been discussing learnedly on the development of parks and their maintenance and then someone, whose attention must have been wandering, incidentally strikes a discordant note by suggesting the subject of the people who are to use these parks and for whom, presumably, they are being created. May we not accuse ourselves of loving our parks and resenting our public? I recall a serious discussion on a park planning and development problem one time that was broken up by a remark by Bob Roberts, who said in effect: "We could plan the park in question a lot better and keep it preserved more economically if we kept the public out of it."

Who is this average man? He is an unknown that every politician and businessman would like to know and clasp firmly to his bosom. He is the subject of vast research—official and private. The very existence of

our political and economic and social life depends upon his whims and trends. It is important, therefore, that we try to find out something about him, and yet he is too variable to be catalogued or tagged. How then can I tell you of the average man—his wants and needs as regards state parks and outdoor recreation?

What the average man does in a state park is the subject of a study that is being conducted throughout the country. But even after these data have been carefully tabulated it will need intelligent interpretation and then perhaps we will find that we have a standard pattern that cannot be applied to any given park area. It has been the contention of some of us, therefore, that these studies had best be conducted, interpreted and applied by the local agency best qualified by familiarity with the local condition.

Also studies are being made to learn what the average man *wants* in state parks. A word of caution in this connection. Your average man will often express the desire for something that he thinks he wants or for something which he thinks he should have, but after it is provided he does not use it. How many of us think we should have the privilege of working daily in a rose-garden and yet burn up our surplus energy and use our leisure time on a golf course? It is advisable not to follow the expressed wishes of the average man blindly. A careful study of what he actually does may better provide the key for solving the development problem. Such advice should be tempered, however, with delayed action. To point to the miniature golf course should be sufficient to illustrate the soundness of this advice.

We build parks for people. We believe that parks by providing a means for an intelligent use of leisure can contribute towards the furtherance of a better life for people—mentally and physically. Yet we may not set ourselves up as the final judge of what is best for the average man, but it is our privilege to try to serve him, and to be able to do so we must provide those things which he will and can use.

This leads us to our concluding observation. Once we determine who the average man may be, we may find that state parks are not built for him. The Recreation Study that is now being conducted may show that the state parks generally are too remote for the use of the average family in the metropolitan areas and that the accommodations are too expensive for the average pocketbook. Then too, we may find that the extensive type of recreation provided in state parks is not in rhythm with the tempo of our normal. That should not be construed as a disparaging remark on state parks as we now conceive them. Our use charts show that there is ample justification for our wilderness preservation and scenic conservation program as exemplified by our state park policies. Likewise it does not mean that we should forget our opportunity to provide outdoor recreation facilities accessible and agreeable to Mister Average Man.

Recreational Development in the National Forests

C. M. GRANGER, Assistant Chief, U. S. Forest Service

I AM struck with the extent to which the objects of this Conference, as quoted in your program, furnish a broad viewpoint and basis for the whole public effort toward providing outdoor recreation of a non-urban character. You have stated the objects of your organization as follows:

> To urge upon our governments—local, county, state and national—the acquisition of additional land and water areas suitable for recreation, for the study of natural history, for the preservation of wildlife, and for historical monuments leading to the better understanding and appreciation of the history and development of our Nation and its several States, until there shall be public parks, forests, and preserves within easy access of all the citizens of every State and territory in the United States; and to encourage private citizens and groups to acquire, maintain, and dedicate for public uses similar areas.

This statement does several things. It indicates that the program should be one in which all branches of the Government, local, county, state, and national, should join; it proposes that there shall be recreational areas of the different types, such as parks and forests; it suggests that the dispersion of these should be such that all citizens of this country should have easy access to at least one of them; it indicates that the purpose is not only conservation and recreation, but education in both the ways of the outdoors and in the history and development of our Nation.

It would be hard to find a better exposition of the purposes and responsibilities in this field of outdoor recreation and education. Although it does not specifically say so, there is the obvious implication that the efforts and programs of the different divisions of Government should complement each other rather than be in competition.

Out of this statement, one draws also the obvious inference that the lands must be in public ownership, or specifically dedicated to public uses, in order that they may serve the stated purposes.

As a preliminary to the definition, as I see it, of the part which the national forests should play in this general scheme, may I refer briefly to the history of the efforts on the part of Government to meet the spirit of your objective. A study of the creation, development, and management of city parks, metropolitan parks, and county and state parks discloses a desire on the part of Government to provide, for the benefit of the people, areas for play in which there should be preserved to the fullest practicable extent the natural environment. Putting it another way, there was the desire to afford city dwellers an opportunity to enjoy a part of their recreation in surroundings contrasting with those of the city streets and having the general quality of undisturbed nature.

History shows too that the effort was one of combating encroachment

of the city, or its characteristics, first upon many of the city parks, thus forcing Government to set up parks outside the city—metropolitan district parks, etc., then the movement of the city toward these parks and their increasing urbanization. Where this has been true, the next step has been the provision of county parks, and then the state parks. The latter, of course, have not been established solely to afford outlets to city dwellers whose near-by parks have become overcrowded or over-urbanized, but they do in a measure represent the efforts of Government to maintain reasonably accessible recreation areas of a natural character.

The national parks, appearing in the picture in relatively recent years, also contribute in a large way to the provision of such outlets, though their primary purpose was the preservation of the supreme and not the development of mere recreation areas.

The national forests might be described as a "surprise package" of gigantic dimensions more or less suddenly unwrapped for the satisfaction of those who wish and need recreation amid the works of nature on a large scale. This opportunity has necessarily been circumscribed in the local park areas originally set aside, because so many of them have, as suggested above, become overcrowded or overurbanized.

You are all sufficiently familiar with the general character and distribution of the national forests, so that I need to go into no detail on that point here. They contain nearly 175 million acres of Government land—about one-twelfth of our land area. Obviously, they are more important, in terms of area, in the recreation picture in the West than in the country east of the Mississippi which, nevertheless, contain some of the best recreation areas in the East.

In addition to vast opportunity for the commoner types of forest recreation, such as camping and picnicking, the national forests present widespread opportunities for very distinctive types of "wild land" recreation, such as trips in the wilderness, climbing high peaks, and what we may call the dispersed type of recreation, namely, that which spreads itself over large areas in a nonconcentrated form, such as hunting, fishing, hiking, touring, and the like. And more recently, there is the extremely popular winter sport type of recreation which the national forests, particularly in the West, provide opportunities for in large degree.

The opportunities for the foregoing distinctive types are obviously not limited to the national forests, but in a good many places the national forests contain by far the greater part of the area on which they may be enjoyed. The size element is very important because it permits spreading recreation use and avoiding to the maximum degree the evils of overcrowding.

I used the term "surprise package" with reference to the national forest for this reason: The original purpose of setting aside national forests was in the main two-fold—to provide supplies of timber and to protect watersheds. No one in the beginning of the national forest enter-

prise could have seen the many uses to which they later would lend themselves. Yet, the Secretary of Agriculture, when he assumed charge of the national forests by transfer from the Department of the Interior in 1905, displayed a prophetic vision of their future use and usefulness. In his letter of February 1, 1905, to the Chief Forester, he instructed:

> That all land is to be devoted to its most productive use for the permanent good of the whole people All the resources of forest reserves (now national forests) are for use, and this use must be brought about in a thoroughly prompt and businesslike manner, under such restrictions only as will insure the permanence of these resources. . . . Where conflicting interests must be reconciled, the question will always be decided from the standpoint of the greatest good of the greatest number of people in the long run.

Back of this broad charter was one of equal breadth provided by Congress in the Act of June 4, 1897, which authorized the Secretary of Agriculture to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction."

Thus was laid the groundwork for a type of management for these properties so flexible as to provide for any suitable type of use. By suitable I mean one which in combination with other uses definitely serves the public interest and is at the same time compatible with the general character of these areas. Recreation has come to be a suitable use of major proportion. It has come not by any effort to get people to use the forests, but because the forests contain that thing which the people were seeking which could not be denied them, and which should not be denied them. It has come so fast that in 1937, there were estimated to be over 14 million visits by people who actually stopped and used the national forests for recreation of one type or another, and over 18 million visits by those who just went sightseeing in them. Many millions more drove through the national forests on travel with some other primary purpose, but nevertheless got at least fleeting enjoyment from what they saw while on these areas. Thus, we have these vast tracts in public ownership under permanent management, which may be said to be almost a gift from Santa Claus of a large-scale opportunity to find recreation in a generally natural environment.

The basic policy of the Forest Service in recreational management of the national forests involves several fundamental things: First, the provision for all forms of recreation appropriate in the forest environment, but the exclusion of those which do not find their logical outlet in the forest. Thus, camping, picnicking, hunting, fishing, touring the forest roads, winter sports, water sports, and the like are traditionally a part of forest recreation. What we may call the Coney Island type of thing, namely, the amusement center, is not a part of forest recreation, and is excluded.

Second, priority is given to the form of recreational use open to every-

one, with anything of an exclusive nature permitted only where the general needs are adequately served. Thus, provision is first made for camping and picnicking facilities, for camps for the use of low-income groups, and for resorts, before room is made for the desirable but necessarily exclusive use, such as summer homes.

Third, effort is made to provide a balanced program which will meet the desires of those seeking different types of recreation. Thus, there is sought adequate provision for the mass forms of recreation, such as camping, picnicking, and at the same time the reservation of areas from the mass types of development, so that they may be kept in a wilderness condition and enjoyed by those seeking that form of outlet.

Fourth, effort is made to determine where recreation values are so high that other uses of the national forests must be modified in a major way or excluded; areas where recreational uses are so nearly absent that they need little or no consideration, and those areas on which there is approximately equal limitation of recreational use and other uses and where both may be enjoyed concurrently without serious diminution in the satisfaction of those benefiting by the two different groups of uses. This latter situation is the prevalent one, but there is also provision for setting aside from other forms of use areas needed for campgrounds and picnic grounds, for the preservation of roadside and waterside beauty, for suitable areas of unmodified virgin forests, etc. All these types of adjustments are included in the multiple-use program.

In introducing developments into the national forests to facilitate use, such as physical improvements on campgrounds and other structures of various sorts, effort is made to follow the principles of landscape architecture and disturb the natural appearance of things as little as possible. In the earlier years, less attention was given to this, and the record is indeed not without blemish, but in the accelerated development of later years, incident to the emergency programs, this has been a controlling feature. In this connection, I take my hat off to the splendid example set in so many places in state park developments in which both state and national park services have done such fine work.

One other major objective in national forest recreation management deserves emphasis—this is the effort to make the recreational opportunities available in fullest possible measure to the low-income groups. We believe in fostering the building of simple organization camps at public expense which can be used in turn by different groups for forest vacations, so helpful to those not able without aid of others to have a real change from arduous daily occupations. What has already been done in some places through coöperation between city and private social agencies on the one hand and the national forests on the other to provide such opportunities should, we believe, be multiplied many, many times. The Forest Service wishes to make the National Forests serve to the maximum degree the objectives so well stated in the platform of your organization.

Recreational Development in the National Parks

CARL P. RUSSELL, Director, Region I, National Park Service, Richmond, Va.

A FIRST responsibility of the National Park Service lies in the safeguarding of the native values that justified the establishment of the reservations. Our problem now is not one of encouraging travel to the scenic national parks. Statistics reveal a rapid increase in numbers of visitors, and that increase will continue. During a seven-year assignment in Yosemite National Park I witnessed conditions change from a moderate summer vacation program to an all-year operation that brought 20,000 people in one day to the floor of Yosemite Valley. During winter months, snow sports enthusiasts fairly thronged to upper levels in the park that formerly knew little or no activity.

One may say that granite walls and snowy slopes are not noticeably affected by human traffic. But topography is not the only feature that makes a Yosemite. The fauna and flora are quite as important in that Sierra picture as are the domes and cliffs—and those biological features are sensitive, so sensitive in fact that the native character of Yosemite Valley has already been modified, and continued punishment may alter it quite completely.

You know, the Service knows, and the park operators know and are appalled at the threat of destruction to be wrought by the persistent human load that the parks must carry. In spite of this knowledge, some people advocate a wide-open policy which will bring to the parks as many recreation seekers as can be freely crowded into camps, or sold accommodations in cabins and hotels. Others go to extremes in urging that we follow Germany in excluding the pleasure-bent tourist from the more sacred areas, making them available only to scientists and students of natural history. A reasoning and more reasonable group argues for the levy of a fee which will automatically control the number of people who will wish to enter park gates.

Whatever the solution, we face the fact that a maximum load of visitors must be cared for in national parks, and that the entire crowd seeks recreation in one form or another. The demand for amusement and entertainment will transcend the call for physical enjoyment or pertinent instruction. How then are we to adjust our program of service so as to maintain the original design of Stephen Mather?

Such able workers as Superintendents John R. White, Edmund B. Rogers, and the late C. G. Thomson have contributed excellent thought on park standards and recreational use in papers published in the AMERICAN PLANNING AND CIVIC ANNUAL. These Superintendents have been in full agreement in decrying the development of artificial facilities in national parks recreation. Baseball, races, tennis, golf, badminton, artificial swimming pools, slot machines, commercial picture shows, constructed skating rinks, artificial toboggan slides, constructed ski-runs,

and ski or toboggan elevators are banned by these executives. In the words of Mr. Rogers, "Recreation is a by-product of some activity or state. An activity, physical, mental, or spiritual, may be recreational. It is not what is done; it is what is assimilated that makes an act recreation."

That most effective conservationist, Aldo Leopold, of the University of Wisconsin, has just published a revealing analysis of his ideas on outdoor recreation. His essay appears in the March-April number of *Bird-Lore*. Mr. Leopold classifies recreationists as (1) trophy seekers, (2) those who look for solitude in the "wilderness," (3) those who merely desire "fresh air and change of scene," (4) those who grope for perception of nature, and, finally, (5) a group possessing a sense of husbandry,—that is, being people of perception, they apply some art of recreational management to their own lands.

Mr. Leopold's conclusions can be very closely applied to our national park problem. Actually, he has pointed to the fact that national park and national forest employees, if working in the field, get a bigger share of true recreation—and get paid for it—than any other class of citizens. Quoting from his paper, "The Government, which essays to substitute public for private operation of recreational lands, is unwittingly giving away to its field officers a large share of what it seeks to offer its citizens. Foresters and game managers might logically pay for, instead of being paid for, the job as husbandmen of wild crops."

Mr. Leopold, like Mr. Rogers, is definite in his assertion that "to promote perception is the only truly creative part of recreational engineering. . . . The only true development in American recreational resources is the development of the perceptive faculty in Americans." We are not apt to place too much emphasis upon this principle. Director Cammerer has defined the interpretive objective in Park Service work as the dominant one and linked with it he recognizes the inseparable recreational element. "Provision for recreation is the *modus operandi* of the system."

Our recreation planners and technicians will, I think, recognize the prime importance of the "development of the perceptive faculty in Americans" in all of their planning in national park areas. There may follow some attempted ridicule in charging that we "make heavy work of it," but if we undertake organization and supervision of artificial means of amusement or force facilities for play in national parks, we will be shame-faced before the critics of later years. Recreation has not acquired such sanctity that in its name any crime may now be committed against the public areas in which atmosphere and inspiration are more important than the lazy disposition of leisure time.

Mr. Leopold's trophy hunters, if they be content with the capture of trout, taking of photographs, or the recording of a climb on a mountain top, may enjoy their brands of recreation in national parks.

Those vacationists who crave the feeling of isolation in nature, may, in spite of popularity of scenic national parks, find full satisfaction for their every whim. Mass use of parks means concentration centers and heavy traffic lanes. It is still a simple matter to leave the crowd and move alone in vast tracts of unmarked wilderness in the larger scenic parks.

The fresh-air enthusiast who must have physical activity with his recreation is easily cared for even in congested areas or on popular trails. If he finds pleasure in camping, hiking, horseback riding, mountain climbing, cross-country skiing, or snowshoeing, he can get his deep breathing and satisfying change of scene in the national parks. This group, in the minds of some recreational specialists, is the important crowd to plan for. I can agree that it is important that we plan for this element in shaping facilities, but campgrounds, riding stables, roads, and trails probably are not in themselves wholly adequate provision, for in this class is a multitude of those who would, if they could, accept further recreational values in understanding the attributes of the out-of-doors that has attracted them.

He who in his recreation would perceive the natural processes by which the parks and their biology have achieved form and character may indulge in his study with no drain upon the natural values of the reservation, but if the Service keeps faith with this breed of vacationist—and he arrives in ever-growing numbers—preparation must be made. Service officials must know more about the scientific and historic aspects of the parks than do the visitors. To attain this end, original research is frequently necessary. A program of interpreting the defined park stories must be planned and put in operation. This involves lecturing, guiding in the field, preparation of certain small trailside exhibits, and the establishment of central contact stations and museum exhibits. Distribution of publications on the essential subjects rounds out the program and makes for dissemination of the information among those who have not entered the park. In all of this provision for a recreation, based upon the idea of a perceptive faculty in visitors, care is taken not to make the facilities obtrusive. To impose the geologist's explanation of canyon-cutting upon the Yellowstone visitor who is intent only upon enjoying the sublime scene in solitude is as unreasonable as insisting that he fish for trout. Probably, the important consideration from a service standpoint is that we be prepared to give the geologist's explanation to the many who do want it.

Those National Park Service officers who have attempted to look into the future of recreational developments in national parks have been frank in admitting their inadequacy in picturing ultimate needs, but all of them, too, have been determined in their official capacities to limit their activities to those phases of recreation in which the native values of the parks contribute the essentials.

Accomplishments of the Park, Parkway and Recreational-Area Study

CONRAD L. WIRTH, Supervisor of Recreation and Land Planning, National Park Service

EDITOR'S NOTE.—See also article on the same subject by H. E. Curtis on page 57.

WHILE the fundamentals of recreational planning are similar for all States, influencing factors which modify the problems involved vary widely as between States and more particularly as between regions. That is why the Study is being made, first on a state basis, involving careful analysis of local conditions and requirements, such as the existing legislative and administrative provisions, the ability of the State to finance an adequate recreational program, the per capita income of the people, specific racial requirements, the availability of recreational lands, and many other considerations. Upon the completion of preliminary reports by a group of States which form a more or less homogeneous recreational region, it is expected that the work of coördinating these reports and tentative plans into a regional report and plan will be undertaken.

In any consideration of a park and recreational area system and program for a State, the matter of proper administration is of vital importance. It is encouraging to note the successful efforts being made by the various States in improving the efficiency of their state park organizations. As a single example, the State of Tennessee last year established a Department of Conservation under which were brought several existing state conservation agencies in addition to a newly established Division of Parks. This is considered a decided step in the right direction. It is in line with the trend toward establishing the administration of state parks under a separate governmental unit distinct from and not subservient to established forestry or game and fish commission. Furthermore, the tendency is to correlate and coördinate those related conservation agencies; such as those dealing with parks, forests, fish and game, wildlife and other natural resources, in a department of conservation, as has been done in Tennessee.

In considering budgetary provisions for state park and recreational areas and programs, proposals incorporated in the Mississippi report are cited as exemplifying results of the Study in this connection. These proposals provide for a director, two technicians, a supervisor of recreation, a supervisor of operations, six park superintendents, a sufficient staff of stenographic and clerical help, and a force of park employees, including custodians, lifeguards, and laborers.

This careful attention to fiscal needs characterizes the situation in all the States. In this connection, you will be interested to know that 22 States which established their first state park budgets after initiation of the Federal emergency program appropriated $946,006 for 1937-38 against $278,000 for 1933-34. Fourteen States which had state park

systems prior to receiving Federal aid appropriated $1,919,771 for 1938 compared with $1,258,315 for 1933.

The reports for both Mississippi and Louisiana recognize the desirability of locating areas and facilities near enough to the larger population centers to permit their frequent week-day as well as holiday weekend and vacation use; whereas the most important recreational needs of the rural and rural non-farm sections are for playgrounds, playfields and small community parks providing opportunities for picnicking, swimming and group activities of a local character.

Another problem dealt with in the reports of these southern States has been met by making detailed studies of the special needs of the Negro population, for whose use areas and facilities are meager or non-existent at present. Because of their economic condition and lack of transportation, the Negroes are in need of a greater number of smaller areas located near their homes, with facilities for day-use activities such as picnicking, swimming, mass and organized sports, social programs and other types of gregarious activities.

In Virginia, there has been applied a method of locating and appraising recreational needs, based on an analysis of the factors of time and cost as they influence travel for recreational purposes. The first step in applying this method in Virginia consisted of establishing 15, 25 and 50-mile zones, by highway distances, around each of the state's existing areas.

The extent of each of these zones was predicated on the results of studies which revealed that frequent week-day use of an area could not be expected from people living more than 10 or 15 miles away and that virtually no week-day use could be expected from people living farther than 25 miles away. People in the lower income brackets must depend on facilities within 25 miles of their homes for practically all of their recreation. (Incidentally, these lower income groups comprise 54 per cent of our southern population, which is a significant factor in all phases of recreation planning.) Due to the elements of both time and cost, a vast majority of those people who earned moderate incomes (comprising something like 35 per cent of the remaining 46 per cent of our southern population) would not travel more than 50 miles for their holiday-weekend outings.

These distances vary in different sections of the country, depending on such factors as the economic conditions and travel habits of the people, adequacy of highways and length of work day. Even daylight saving time has its influence, as has been demonstrated by the larger week-day use in northern areas attributed partially to this factor.

By using a zone map as a transparent overlay in conjunction with a population distribution map, those population centers of the State not served by existing areas were clearly indicated.

It might be added that these zones also provide an excellent means of breaking a State down into logical and well-defined planning units for the purpose of analyzing and determining the need for specific types of

facilities, such as those providing swimming, picnicking, boating, hiking and other similar activities. It facilitates the appraisal of such influencing factors as racial characteristics and economic conditions and otherwise simplifies problems connected with the planning of adequate recreational area systems and programs.

The serious interest of the States is indicated by the fact that 20 of them are contributing funds or detailing personnel specifically to assist in its conduct and 17 others are making contributions through the part-time assignment of personnel and facilities. The Works Progress Administration has rendered valuable assistance to most of these States in carrying out the Study through the provision of such facilitating personnel as work supervisors, statisticians, draftsmen, clerks and stenographers.

The Study is a practical and business-like approach to the task of conservation for outdoor recreation in that it first takes stock of what now exists in the way of recreational areas and facilities, then seeks to appraise the needs of the people and the recreational resources of the section of the country in which they live.

To a large degree, it is breaking new ground. Certainly no undertaking of such magnitude in the field of recreational research and planning has ever before been attempted. This necessitates a certain amount of trial and error, but through a pooling of procedures and techniques, made possible by having the National Park Service to act as a clearing house for successful ideas, it is rapidly formulating a method of study and planning which should assure sounder future results in the field of conservation for outdoor recreation.

Camping Trends and Public Areas

JULIAN HARRIS SALOMON, National Park Service

TWENTY-FIVE years ago the first organized camps were established in Palisades Interstate Park. Last year, according to the official report, camps in that park were attended by 90,000 children and adults. That is a splendid record. It is even more significant when we consider that the number of visitors is not the final test of a park's value but rather the kind of use they made of it.

These 90,000 campers were in the park under trained leadership which provided recreational programs. Their stay was made pleasant and profitable. They were taught how properly to use and enjoy the park and as a result of their experience, they will, for the most part, have developed a lifelong appreciation for outdoor recreation. City dwellers need this leadership and training, for during the past few decades they have had little opportunity or experience in the use of natural recreational facilities.

Another interesting fact about the 90,000 is that most of them would never have reached the park if organizations had not existed to bring

them there and if the park commission had not made the camping facilities available at low cost. Many children whose parents do not own automobiles and who could not afford to go on vacations were in those camps. Some of the parents were there too. Here is a splendid example of the way in which coöperation between a park and public, semi-public and private non-profit organizations can contribute toward a solution of the park leadership problem and of that of providing for vacations and park use by the lower income groups.

These campers were in the park 24 hours of the day, seven days of the week and many of them were in the park again in the fall, winter, and spring. Park-use studies so far made, reveal that on week days our parks are little used in comparison with Sundays and holidays. This, coupled with the comparatively short season during which most parks are open, makes increased week-day use and longer seasons most important conditions to adjust if parks are to economically fulfill their objectives. It seems that camping offers a solution.

The camping movement in the past few years has gone forward with a strength and vigor greater than at any time in its history. New interest and activity in this field is evident in all parts of the country and with it has come a better understanding of the opportunities camping offers for recreation, education and the conservation of human resources. We find in the sponsors of new camping enterprises the schools, churches, coöperatives, labor unions, stores, industries and public and private agencies representative of every phase of our national life.

It is natural that these groups and those interested in hiking, water sports and winter sports should turn to the state and national parks, for these types of recreation are inherent in a forest environment. Only on these and other publicly owned areas can be met the great need for outdoor recreational facilities on a wide scale, at a low per capita cost. They will not be provided on a commercial basis for there is not sufficient profit in them and semi-public and private agencies have proved over the years to be unable adequately to provide those facilities from their limited funds. In the field of camping this is particularly true. There is a great need on public areas for camp facilities of all types that can be made available at low cost.

To a small extent these camping needs have been fulfilled during the past three years by the development of the Recreational Demonstration Areas. Last year 21 camps had been completed which operated to a capacity of 101,000 camper-days. This year it is hoped nearly to double these figures. Several new camps have been erected or proposed in state parks during this time but it is quite apparent from the increasing and continued demand that we shall not go wrong in providing more campgrounds, group camps and trail lodges in our parks and recreational areas.

Among recent developments in this field none has greater significance for park planners than the new interest that is being shown in camping

by the schools. Some reasons for this are pointed out in a recent statement by Commissioner of Education, John W. Studebaker, who says:

Camping has served to give new meaning to education, lifting it from a cloistered world of theory into one of realism and everyday experience. Camping has operated as a liberalizing and progressive force in American education.

The educators of the country are wise who recognize what the camp—be it private or public—is now doing to develop the individual's whole personality, his interests and his abilities. The camp has helped much to develop plans for using work as a vitalizing force in the educational process. It has taught youth to learn to do a job while actually at work in it—to learn by doing.

There is an opportunity in the camp to get back to a natural type of education and individualized development. Here the youth learns how to deal practically with life situations and to adapt himself to them.

It is greatly to be hoped that camping will continue to contribute to the progressive development of American education and that public schools will increasingly make camping activities a part of their program.

In a report on "Human Resources" made by the American Council on Education to the National Resources Committee this recommendation is made:

Programs of land usage should provide, in the vicinity of each city, for one or more large areas which may be used continuously by the public school system.

There are many types of nature observation and study, many forms of art and craft, and many types of recreation which can best be carried on in the woods.

It should be expected that, throughout the full twelve months of the year, groups of pupils would go to live in the school camp for a week or so at a time.

Closely allied with the school camp are the new field study trips and travel camps of which there are a rapidly growing number. You have probably seen the articles in *Time* and the *Readers Digest* on the Lincoln School's trips to the South and to the Pennsylvania coal fields. They are but the forerunners of a great recreational-educational travel movement for youth, for the schools have recognized that while experience through reading is good, experience through direct observation and participation is better. The *New York Times* said that after the first Lincoln School trip, tests showed that the senior class almost doubled its knowledge of soil management, flood control and the production of electricity after visiting the TVA site at Muscle Shoals and rural rehabilitation projects in Georgia and Virginia.

We need to be prepared to meet and help this movement by providing inexpensive overnight accommodations, such as trail lodges, in parks of special scenic and historic interest and those located on main transcontinental travel routes.

On this subject I would again like to quote from "Human Resources":

Schools have only begun to utilize the changes in methods of teaching history and geography which are made possible with modern methods of transportation and demonstration. In addition to preserving historic spots as public parks, it is important to build up facilities which will make a visit by youth groups as rewarding as possible. This means museums of the "active" type which call for participation, not merely passive observation.

It involves also adequate camping facilities because such tours should be made available to the large sections of the population with low incomes. The time may come when every adolescent will include as an important part of his development, satisfaction of the age-old desire to "see the world."

When proper facilities have been arranged, a year of travel about the country might prove no more expensive and much more rewarding to the average American boy or girl than a year of college.

On the Blue Mountain Reservation in Westchester County we have recently completed our first trail lodge. This structure contains dormitories for 15 boys and 15 girls, a common kitchen, a living-dining-room and an apartment for the custodian. Four smaller lodges to be ready for use on July 1, are under construction on the Recreational Demonstration Areas where traveling youth groups may be accommodated at a fee of 25 cents per person a night. In addition, as parts of the organized camps, we have provided over a hundred of these small lodges which are similarly available for use by traveling groups during the greater part of the year. These lodges are open to any group under adequate adult leadership.

As young people in this country make their long trips mainly by bus or automobile, the lodges are located near motor roads. In scenic or natural areas they will serve as a base for tramping trips afield when the groups will sleep in lean-tos or other simple shelters on the trail. This plan was outlined by Regional Director Frank A. Kittredge of the National Park Service in a recent paper. He said:

Typical portions of the primeval areas of the future must be made accessible on foot to the boys and girls; the men and the women who shall safeguard these great primeval areas in the next decades.

The finest possible expenditure both in conservation of our youth and in conservation of our natural resources will be obtained when the Federal Government expends some hundreds of thousands of dollars in building moderate trails, low-cost shelters, and trailside lodges.

These facilities will permit groups of young folks, under auspices of organizations such as the Boy Scouts and the Girl Scouts, and families to go afoot between shelters, between places where low-cost subsistence may be had for those who are unable to meet the expense required to pack in their subsistence and shelter. There seems no reason why a boy's two weeks' hike through the high Sierras or through Glacier National Park or Mt. Olympus could not be made to cost about as little as he now spends for two weeks in a Y. M. C. A. camp.

So far as the future (National Park) System is concerned, we may be hearing about the forgotten boy and the forgotten girl who are going to run the conservation activities of the country in the next generation. There is no better way of conserving natural resources than to spend a little money in the primeval areas of our country to make them walkable and livable to our youngsters.

A return to tramping trips and smaller and simpler camp facilities is indicated in the programs of some of the larger camping organizations. These groups desire a minimum of facilities which may be easily provided in most parks. In their simplest form they would consist of campgrounds large enough to accommodate a group of twenty or thirty with

safe water and sanitary facilities. A site of this kind might be further developed with a cabin, with an attached outdoor kitchen and a wash and shower house. Such a unit would be useful to a great variety of urban and rural groups.

So far, I have spoken of the needs of organized groups of young people. For families and the independent camper the need for low-cost camping facilities is equally great. Campgrounds have not been as generously provided in our state parks in the East as they have in the West. Yet the need for them here is equally great and that Easterners will use them is known to anyone who has visited the Adirondacks, the White Mountains and the southeastern national forests. A few cabins to be rented at $2.50 to $3.50 a day and from $15.00 to $30.00 a week, have been provided in many of our parks. These serve in a very limited way, a small part of our population. The same labor and money put into campground development would serve a great many more.

Campgrounds, when they have been provided, have nearly always been great mass affairs resembling commercial tourist camps where the maximum number of tents and trailers are crowded on each acre. In our organized camp planning we once followed the same mass idea. Because of its many disadvantages it was abandoned and our big camps are now broken down into small units. The same idea needs to be applied to public campgrounds in state and national parks.

Smaller units would need to be distributed over a larger part of the area than are concentrated campgrounds but they would in the long run be less destructive to the park. Certainly they would be less likely to become the unsightly recreational slums which some of our public campgrounds undoubtedly now are and they would be far more satisfactory to the campers.

We also need in the East to find ways to provide family camps similar to those that have been so successfully operated by municipalities on the Pacific Coast. Here is a field our park systems might well enter. As an example of their low cost I might mention the San Francisco Municipal Camp near Yosemite where a cabin and three wholesome meals may be obtained for $2.00 a day. In addition, an excellent recreational program is provided in which campers may participate, if they so desire.

The cabins in these western camps are built to rent at a low rate. They are much simpler than the expensive stone and log bungalows we so frequently provide and they do not contain the bathrooms and plumbing that some think are absolutely essential. The cabins are grouped around central shower, toilet and laundry facilities and the inconvenience of walking to them is readily accepted as part of the adventure of camping out. They even get along without electric lights! Says Superintendent White, of Sequoia, on that subject:

> Electric lighting is such an accepted utility that at first it seems necessary everywhere in public or operator areas. Yet nothing conduces to a quiet park

atmosphere as general darkness except in or near buildings.—We are against street or highway lighting. Operator's cabins are lit by kerosene hand lamps and candles. Many visitors like it. Few complain. Some are loud in approval. I think that with a little pressure we could have had a $100,000 electric light layout at Giant Forest a few years ago; but we are now glad that the pressure was not exercised.

I am sure that we will find these simpler facilities, which to my mind are in keeping with the park atmosphere, acceptable to the greater part of the public which we should be serving.

Camps, campgrounds, and low-cost cabins for the use of schools, traveling youth groups, recreational organizations and for families are among the most needed recreational facilities on all types of public areas now and in the foreseeable future. As we make evident our willingness to make our areas of greater value to the community by meeting these recreational needs we may lay claim to substantial and continuing appropriations to make this work possible.

In closing I want to share with you this recent letter from Lebert H. Weir:

Please accept my heartiest thanks for a copy of the report entitled 'The National Park Service in the Field of Organized Camping.'

The fact that the National Park Service has gone into this important service field ought to have a very profound effect in extending it among municipalities and private agencies—in fact it already has, as I see by the report. I sincerely hope that sometime the educational authorities of the country will incorporate camping as a part of the regular school activity, organizing their schools on a year-round basis, utilizing the summer season for camping and other forms of outdoor life activities, especially for the pupils in city schools. Of course every park and recreation department ought to do something in the field of camping. I feel very strongly that one of the greatest social-educational-recreational services that can be rendered city boys and girls is to bring them into vital contact with the open country just as often and just as long as possible. The more I see of city life the more I fear for the future welfare of our country, especially so long as urbanism is the dominant characteristic of our culture. Industry and the soil must be more closely linked somehow if we are to avoid the ever mounting numbers of unemployed and the ever rising need for public and private relief. It is an interesting fact that most of our present-day pathological social problems arose with the rise of industry and urbanism—also our economic problems.

I think that there is no more important thing both in the social and economic fields than the things you in the National Park Service are doing to turn the minds and hearts of the people to the first and the last mother of us all—Mother Nature. The longer I remain in this work the more I feel that the park people hold the most fundamental elements for wholesome recreation both in its physical and cultural sense.

Value of Water and Shore Line for Recreation

H. S. WAGNER, Director-Secretary, Metropolitan Park District, Akron, Ohio

THE opportunity to enjoy restful or inspiring scenery will always be cherished. To come in contact with the sights and scenes of historic or natural interest remains sufficient recreational opportunity for many. State and metropolitan parks offer picnic opportunities for the family.

The further uses of such areas, overnight, week-end and vacation camping, are by no unusual train of thought, little more than extensions of the part day use which is involved in picnicking. Where facilities exist, there seems to be just as much variety in the type of recreation by the visitor for a day or the party on a vacation for several weeks. In anticipation of this demand therefore, it seems to follow that provisions for recreation by means of water should be made whenever possible. It follows also that in regions where natural bodies of water are nonexistent and where the population is concentrated, this demand is automatically increased. Where winter sports are impractical there will be greater demand for recreation by water in the longer summer season, and in the northerly part of the country the possibility of the year-round use of such developments through winter and summer sports is equally forceful. In both cases the value of natural or created bodies of water in the broad landscape is a foregone and accepted conclusion.

Several writers of note have expressed the sentiment that the land areas of the world must be reserved for the production of the necessities of life, and that water areas therefore should be better prepared and reserved for broader recreational use. Surely nobody will deny that the appeal of water for people on recreation bent is ages old and on the increase. Whether the park administrator adjusts an existing body of water or creates an artificial one seems to be beyond the scope of this suggestion. It is conceivable that in certain locations, structural pools are to be preferred to lakes resulting from the building of dams. Here, it might be suggested, the value of both water and shore line for recreation is almost wholly dependent upon sound engineering design which has regard for size and character of the watershed and the rainfall. Even though no troublesome draw-downs are presented as in the case of water impounded for hydraulic electrical purposes, the body of water which is expanded beyond the facts and is based upon hopes rather than on statistics is quite certain to be found in a list of liabilities of a park.

Upon the location of the service features of waterfront activities the value of such facilities is also nearly wholly dependent. Whenever the activities reach all around the shore, nearly all of the value is lost. The sand and turf beaches, the bath houses and the usual features may be made to contribute to the advantages of many people for many years only when a balanced and well-conceived plan which recognizes the maximum possible use has been followed. The overloading of water-fronts invariably results more disastrously and the damage is often longer lived than in the over-burdening of facilities created or existing on the land.

The ever-present problem of expense in development and maintenance should be weighed more heavily than it has in the past in this matter of facilities for recreation by water, despite the fact that such features lend themselves to operation on a fee basis better than do any of the other services which are rendered to the public in such parks.

Interstate Agreements and Compacts

GEORGE W. OLCOTT, Park Planner, National Park Service

THE first interstate compacts respecting any park, parkway or recreational area were consummated in 1937: The Palisades Interstate Park Commission was established as a joint coöperate municipal instrumentality of the States of New York and New Jersey; Ohio and Pennsylvania entered a compact relating to the development, use, and control of Pymatuning Lake for fishing, hunting, and other recreational purposes. This same year a bill was introduced before the General Assembly of Missouri providing for the establishment by interstate compact of the Missouri-Illinois Parkway Commission but did not pass.

While these are the first compacts respecting parks, States have resorted to this means of furthering their mutual interests ever since the formation of the Constitution. In 1785, Maryland and Virginia entered into a compact or treaty regulating the right of fishing in the Potomac River.

It is well established that States, as sovereigns, may enter into any compact or agreement with each other, subject to the consent of Congress.

On June 23, 1936, the Park, Parkway and Recreational-Area Study Act was approved. Section 3 of this act reads as follows:

> The consent of Congress is hereby given to any two or more States to negotiate and enter into compacts or agreements with one another with reference to planning, establishing, developing, improving, and maintaining any park, parkway or recreational area. No such compact or agreement shall be effective until approved by the legislatures of the several States which are parties thereto and by the Congress of the United States.

Although this enactment indicates that such compacts properly require the consent of Congress, in giving its prior consent to the negotiating of such compacts Congress recognized the importance of interstate compacts dealing with recreation.

What are the reasons and necessity for two States entering an agreement regarding recreational development? Why can't each State manage its own recreation affairs, planning its developments to meet its own needs and the overflow requirements of the adjoining States without going to all the trouble of formal compacts, requiring legislative action by the States and the Federal Government?

These questions can best be answered by considering the reasons for the recent compact of New York and New Jersey pertaining to the Palisades Interstate Park. After working together for 37 years on the acquisition, development, and operation of this park the two States found it desirable legally to establish the interstate character of the park.

The statement of Mr. J. DuPratt White, President, Commission of the Palisades Interstate Park, at the hearing before the Ways and Means

Committee of the New York Assembly regarding the then proposed compact, established many sound reasons for the compact. He said:

The Palisades Interstate Park was established in 1900. The machinery set up at that time for its management consisted of two separate State bodies—a New York Commission and a New Jersey Commission—each consisting of ten members. It was contemplated that the activities of the two state boards would be coördinated through having identical members of the two state Commissions, five residents of each State. This coördination, however, rests entirely upon comity and has no basis in law. A Governor of either State may refuse to continue this policy of appointing identical members. If this should happen, the management and development of the park as a unit would be destroyed.

In 1925 the Laura Spelman Rockefeller Memorial, which had contributed large sums to the park, employed Mr. Mark M. Jones of New York City to make a study of the park, its management and operation. The report consisted of 399 pages.

Apparently the only basis for his recommendation against any large or important financial support was the corporate structure of the Commission. The survey stated as follows:

"The unity and continuity of the park as an interstate enterprise are not formally assured at the present time. Legally, its affairs are in the hands of two separate corporations. Withdrawal or fundamental changes in policy on the part of either state would sacrifice the advantages of the interstate basis. The present organization structure, resting on comity and custom alone, does not provide a sufficient guarantee of permanence to warrant large and important financial support."

We believe that the proposed compact will be of inestimable value to the future of this great interstate project. It will allay the fears of possible donors that there might be a change in the fundamental policy of either State toward the park and thus frustrate the purposes of the gifts. With these fears allayed, the Commissioners look forward to the time when they will obtain gift funds with which they can provide income-producing operations that will make the park wholly self-sustaining. The compact will insure for all time to come the protection of the interests of each State in this project. The compact accomplishes this without either State surrendering one iota of its sovereignty. Neither State is obligated to appropriate anything to the park. The compact will make clear the status of the park as an interstate project and remove the embarrassments which have arisen so often in connection with laws which are state-wide but which, if applied to the Palisades Park would seriously interfere with the interstate aspects of its operation. And finally the compact will legalize expedients that have been adopted in the interest of the park and make for its efficient and economical operation.

The reasons, needs, and advantages of the Palisades Interstate Commission established by compact may equally well apply to other interstate recreational areas. A single authority simplifies the administration, development, and maintenance of an area as a single unit. It aids in the coöperation with other agencies. It will allay the fears of possible donors as to the permanency of the park.

Roy A. Vetter, Assistant Attorney with the National Park Service, has stated in his article "Interstate Compacts in the Field of Recreation":

No participating State need surrender or subordinate its powers or prerogatives to the other. Authority deemed incompatible with the purposes and objectives of the compact may be withheld. Appropriations, both as to amount and purpose, are determinable by the legislature of each State. While a primary

purpose of such compacts is to insure permanency of administration, it is open to the participating States to stipulate the terms upon which the compact may be terminated.

On the other hand, added authorities and duties may be conferred by a participating State, to be exercised exclusively within its territorial limits, without the necessity of concurrence by the other. Additional jurisdiction, authority and duties may be conferred by joint action of the participating States.

The compact, upon adoption, becomes a contract protected by the Federal Constitution against legislation impairing its obligations.

The Park, Parkway and Recreational-Area Study has brought to light several desirable interstate areas and others will probably be planned as a result of the study. There are several metropolitan regions which include parts of two or more States (for example the Chicago, St. Louis, Kansas City, Cincinnati, Omaha regions). The provision of adequate recreational areas to serve these metropolitan regions may involve interstate coöperation and the establishment of Interstate Commissions as it has in the New York region.

The state planning agencies of Wisconsin and Illinois have recommended a large park on Lake Michigan at the Wisconsin-Illinois State line. It would provide a public beach serving the people of Chicago and Milwaukee.

In the St. Louis region the War Department is constructing a navigation dam which will form a large pool or lake in the Mississippi River. The lake will be of great recreational value to the people of Illinois and Missouri. The Corps of Engineers, United States Army, the National Park Service, the States of Missouri and Illinois, and the St. Louis Regional Planning Commission have been coöperating for the recreational development of the lakeshore. In the National Resources Committee report "Regional Planning Part II—St. Louis Region" referring to this project it is stated:

> An official regional authority would have proved of great assistance in bringing about the necessary coördination and would also have been the logical agency to sponsor the project.

The proposed Missouri-Illinois Interstate Parkway Commission would have authority to acquire, develop, administer, and maintain a parkway from Chicago to St. Louis along the Illinois River and southwest to the Lake of the Ozarks. Another interstate parkway proposal has come from Missouri. Considerable interest has been indicated in the proposal of a parkway along the Mississippi from Duluth to New Orleans.

Interstate Park Commissions have been suggested as the proper authority to develop and administer two proposed interstate parkways out in the southwest: The Raton Pass Parkway between Raton, New Mexico, and Trinidad, Colorado, and the Anazazi Parkway between Lupton, Arizona, and Manuelito, New Mexico, which would not only preserve unusual scenic and historic strips of land, but also provide outstanding entrances to the States and certain recreational facilities for tourists and the local people.

Extensive trailways may also require interstate agreements if their value is to be protected. It has been suggested that there should be an agreement between the States traversed by the Appalachian Trail as to the development and maintenance of the trail.

It is certain that interstate agreements or compacts offer a means of solving some of the problems involved in the ever-widening fields of recreation and conservation.

Parkways and Freeways

EARLE S. DRAPER, Director, Department of Regional Planning Studies, TVA, Knoxville, Tenn.

IF YOU drive from Norris to Knoxville you will traverse, for part of the distance, the Norris Freeway, where you will observe an absence of billboards, gas stations, tourist camps, beer gardens, and hot dog stands along the right-of-way, and in the road itself, an absence of sharp turns, vertical curves, and other hazards to safe motoring.

It is not mere chance that these undesirable traffic hazards and unsightly roadside developments are missing; nor is it because the highway is new and the mushroom of ribbon growth has not yet sprung up. It is because the road to Norris is a freeway—a rural freeway—and standard equipment of a freeway does not include hot dog stands, billboards, blind intersections and the like.

"Freeway," as you probably know, is not just our pet name for this stretch of road. Freeway is a specific type of highway designed for a specific type of traffic.

Obviously different from 99 per cent of American highways today, a freeway is not essentially a through express highway, nor is it solely a parkway. It embodies principles of design and esthetic standards.

Above all, a freeway is safe. "Free" from the normal traffic hazards so often attributable to engineering design (or lack of it)—intersections, steep grades, sharp curves, side roads, narrow bridges, and obstruction of vision. It permits a relatively high driving speed with much greater safety than the average highway.

Although not primarily a recreation drive, it often features wayside picnic areas and overlooks. Scenic easements may be acquired to further protect the natural beauty of the roadside.

But its most distinguishing feature, a feature responsible both for a large measure of the freeway's safety and practically all of its harmonious roadside development, is that of controlled access. Owners of property abutting the freeway have no rights of light, air or access. Through this factor of control are eliminated virtually all accidents resulting from cars entering the highway; through this same factor of access control are eliminated the undesirable roadside developments.

Controlled access, however, and the development of wayside areas

are often features of other types of road. How, then, is the freeway especially different from other roads?

Edward M. Bassett, City Planning Authority of New York, gives us the most concise and precise definitions of the several types of road:

A *highway* is a strip of public land devoted to *movement*, over which the abutting property owner has *a* right to light, air, and access.

A *freeway* is a strip of public land devoted to *movement*, over which the abutting property owner has *no* right of light, air, or access.

A *parkway* is a strip of public land devoted to *recreation*, over which the abutting property owner has *no* right of light, air, or access.

From Mr. Bassett's definitions it is readily apparent that the prime difference between a freeway and a highway is not one of use—for they are both devoted to movement of traffic—but one of control, one of controlled access; whereas the parkway differs from both the freeway and the highway in that it is dedicated primarily to recreational use—rather than to movement—and at the same time it embodies the freeway principle of controlled access.

During the hectic days of the 1920's parkways all but passed out of the picture in the wild scramble to build highways, mile after mile of highways. The accent was on quantity—a veritable race between the States to see which could have the most miles of concrete or asphalt per car. Today we are paying in lives and in dollars for this emphasis on quantity and for the lack of selective design.

But getting back to parkways, this type of road first appeared as a carriage drive. Literally, a "way" through the "park." The coming of the automobile and its eventual spread to all income levels pushed the demand for parkways far beyond the limited accommodations of the carriage drive type. So, bigger and better parkways were built.

You have all risked your necks on many of these parkways.

And it must be remembered that this all sprang from the original idea of *pleasure* drives.

Happily, however, we at last seem to be returning to the original concept of the parkway. Today we see a national interest in parkways, in purely recreational drives. The magazine *Fortune* not long ago had a comprehensive study on the nation's highway system and recognized the need for a type of road that would take the pleasure driver—the tourist and the Sunday motorist alike—off the congested through highway with its traffic hazards and its uninspiring roadside signs of "progress," and put him on a road of his own, a road where he can proceed at his leisure or speed up at his pleasure, where he can stop to get a view of the sunset, where he can park his car near a tumbling stream and spread a picnic lunch in a clean, enjoyable, uncommercialized atmosphere. More recently, March 26 of this year, the *Saturday Evening Post* carried a thoughtful article by Paul G. Hoffman, president of the Automotive Safety Foundation and of the Studebaker Corporation. Treating the

subject from the viewpoint of safety, Mr. Hoffman pointed out the need for a definite type of road for definite types of traffic. Recreational traffic is a very definite type and the parkway is its corresponding type of road.

For despite the fact that the parkway of today—scaling mountains, penetrating forest wilderness, bridging swamps (as some now under construction will do) and possessing several undeniable rights—would scarcely be recognized by its parent, the carriage drive through the park, parkways today perform the same function as they did before the advent of the automobile. That is, they are first, last and always, pleasure drives.

Mr. A. E. Demaray, Associate Director of the National Park Service, sums up the characteristics of the parkway:

A parkway is designed for passenger car traffic and is largely for recreational use. It aims to avoid developments which mar the ordinary highway.

A parkway is built within a wider right-of-way, which acts as an insulating strip of park land between the roadway and the abutting private property.

A parkway is preferably located through undeveloped areas of scenic beauty and interest and avoids communities and intensive farmlands.

A parkway makes the best scenery available even at the sacrifice of shortness of route.

Grade crossings between the parkway and main intersecting highways and railroads are eliminated.

Points of entrance and exit on a parkway are widely spaced to reduce traffic interruptions, and a secondary road is often provided to carry local traffic.

Scenic easements are introduced to secure a maximum of protection without increasing the land to be acquired in fee simple.

These regulations established by the Park Service for the acquisition of parkway rights-of-way, nevertheless apply in general to all modern parkways. The parkways of Westchester County, including the Bronx and the Hutchinson Parkways, are well known to millions of people. The new Merritt Parkway, extending through Fairfield County, is an advanced type of project. The George Washington Memorial Parkway, from Washington, D. C., to Mount Vernon, is our best-known national parkway. All of these parkways serve as speedways as well as park routes and at the present time divert considerable through travel because of attractiveness of setting.

Two extended national parkways, both at present under construction, must also be mentioned as they represent long strides forward in the solution of our highway problem. These two projects are the Blue Ridge Parkway and the Natchez Trace Parkway, with which you undoubtedly are acquainted. The Blue Ridge Parkway, when completed, will connect the Shenandoah National Park and the Great Smoky Mountains National Park. This road will be more than 450 miles long. The average elevation of its projected route is 2,500 feet above sea level. Rights-of-way averaging 150 acres to the mile are being obtained by the States of Virginia and North Carolina and are being deeded to the United States in fee simple and under scenic easement. Access to the parkway will, of course, be limited, and suitable overpasses over important highways

and railroads are provided for. Adjacent to the parkway route the Federal government is developing several recreational and service areas which will provide for overnight accommodations, camping, hiking, and other recreational opportunities.

The Natchez Trace Parkway will follow the historic military and trade route from Nashville, Tennessee, to Natchez, Mississippi. The same principles of roadside protection and traffic safety are being followed in this project as in the Blue Ridge Parkway.

The opportunities for such development are practically yet untouched and the need is unquestioned.

But what of freeways in the recreational development picture? Freeways will undoubtedly play their part. In the crowded metropolitan regions where volume of traffic demands several different types of road, freeways may serve to divert much of the through traffic now using the metropolitan parkways and will thus leave the parkways free to return to their original purpose. In the definitely rural areas, freeways, by virtue of their superior engineering design and their controlled access, may serve as both the movement and the recreation type of highway.

That is the role of the Norris Freeway. We have applied freeway principles to a rural highway and are well satisfied with the results.

The Appalachian Trail

PAUL M. FINK, Member, Board of Managers, Appalachian Trail Conference, Jonesboro, Tenn.

EVERY forward stride of progress in this or any other country has been the result of a dream—a vision in the mind of some far-sighted soul who could see beyond the immediate present and visualize some great thing out in the future. Benton MacKaye dreamed a dream—a dream of a people turning more and more for recreation from the crowded cities and densely populated areas to roam afoot in the woods and mountains, to seek the wilderness for rest and physical relaxation and spiritual up-building. For their use he could see in his mind's eye a series of woodland paths and wilderness areas, bound together into one far-flung system by a master trail running North and South down the backbone of Eastern America, from the Canadian border to the foothills of Georgia. This long path he christened the Appalachian Trail, and in 1921 he presented the idea to the public in an article published in the Journal of the American Institute of Architects.

It immediately attracted widespread attention, particularly in New England, where recreational use of the mountains had long been established and where the New England Trail Conference had already in existence a coördinated trail system from Maine to the Hudson, a splendid nucleus from which to build. Recruits were enlisted and the route farther South was considered. The first southern terminus suggested was

Mt. Mitchell, but further study of the terrain has relocated and extended the Trail until its Southern extremity has rested on Mt. Oglethorpe, in Northern Georgia. North it has been pushed from Mt. Washington more than 250 miles across a wilderness to Mt. Katahdin in Maine.

Various outing groups and individuals were contacted and interested, routes chosen and scouted, and some marking and construction done. In the spring of 1925 a meeting was held in Washington and there the Appalachian Trail Conference was formally organized, officers elected and a constitution adopted, and the movement was all set.

Yet soon interest lagged and the Conference bade fair to die a death of inaction, until Arthur J. Perkins, of Hartford, Conn., became interested. His energy and enthusiasm put new life into the project; he visited many places and people, North and South, helped locate doubtful sections, made valuable contacts and stirred up new interest all along the line, until the Conference began to function as never before. But he was not fated to see the Trail completed, for in 1930, just as he prepared to attend the meeting of the Conference at Skyland, Va., he was stricken by illness and was never able to resume active connection.

Laboring enthusiastically with Judge Perkins was Myron Avery, a young admiralty attorney of Washington, and into his capable hands the task fell, to be pushed on energetically until now the Appalachian Trail stands complete, some 2,050 miles of it, the longest continuous footpath in the world—an epochal achievement, when one remembers the multitude of difficulties that have had to be overcome. The names of these three men—Benton MacKaye, Arthur Perkins and Myron Avery—will always be remembered as those to whom we give all credit for the conception and the completion of the Appalachian Trail. At the same time, we do not in any way minimize the efforts of those hundreds of other enthusiasts who have labored so faithfully in the work.

To some who are yet unacquainted with it, the name Appalachian Trail is misconstrued, for they find it difficult to envision a trampers' trail so long and instead think of it as a motor trail or highway, like the Appalachian Scenic Highway, so highly advertised a few years ago, and when mentioned we hear them say, "Yes, I've driven over it." Not so, for the Appalachian Trail is a *footpath*, pure and simple, and save in those few spots when the necessity of crossing valleys in changing from one mountain range to another makes imperative the following of motor roads for a few miles, it is not to be traversed by any wheeled vehicle, unless it be the one seen by a certain trail follower in North Carolina a few years ago.

This man recounted that he had penetrated the depths of the Great Smokies until the trail he followed had all but "petered out" and he felt sure no one had gone farther than he. Sitting down to rest, he heard a noise, and looking farther up the dim trail, saw approaching what he called "a crazy Indian riding a bicycle." Instead of an Indian it proved to be the late George Masa, the Japanese trail enthusiast of Asheville, a

bright bandanna handkerchief tied about his head and pushing before him the measuring wheel with which he was gathering trail data.

This great footpath, following as nearly as possible the skyline of the Appalachian Mountains from Katahdin in Maine to Oglethorpe in Georgia, two thousand and fifty miles of it, every foot complete, marked and signed and with trail data available so that it may be easily followed from end to end, is the longest single trail in the world. A metal marker, of copyrighted and distinctive design, has been developed, that is placed at frequent intervals and between, on trees and posts, have been painted white blazes to guide the traveler. The footway has been chopped and brushed out wherever necessary, and periodically working parties from the various interested organizations go over the sections under their care, to clear and maintain the right-of-way.

For the further guidance of the tramper, every foot of the Trail has been traversed by the measuring wheel and complete trail data have been compiled, showing distances, connecting trails, water, shelters, and description of points of interest. This has been made available to the public in a series of five guide books, covering all the Trail. So now there is no reason one should have to depend on local information as he goes along, and getting such directions as were once given a friend of mine. This friend, asking a native what path to follow, was told, "Just go down this trail a ways 'til it forks. There you take the right hand fork and keep on that a spell 'til it forks again. Then you take the left hand and go with that a far piece 'til it forks three ways. Then it makes no difference which one you take, for you're done lost already."

Another unique feature about the Appalachian Trail is that it is entirely the result of volunteer labor, the work of men and women who have received no compensation for their services other than the satisfaction of having a hand in putting across so magnificent a project. The budget of the Conference, including the cost of postage, stationery, paint, markers, and publications, is only about $500.00 per year. No officer of the Conference draws a cent of salary or even expense money. The tasks of scouting, routing, clearing, and marking the trail have been done by volunteers, the working parties being mostly composed of professional men and women, office workers, college students, and others—the white-collar class—who have welcomed this opportunity to get into the out-of-doors.

In telling of the completion of the Trail we must give recognition of the wholehearted coöperation of the National Park Service and the U. S. Forest Service. In its way from North to South the Trail passes through two National Parks and seven National Forests, and in every instance those in charge aided in every way possible, making available those portions of their own trail systems that were desired to be included in the main trail thoroughfare. Had it not been for this great assistance on their part, years more would have been required before we could pridefully point to a completed Trail.

I say "completed Trail" and yet I do not mean just that. For the moment, it is completed in that it is open, marked and logged the whole way, but there is yet much work ahead of us. One great problem is that of maintenance. In a country of profuse and rapidly growing vegetation, like the Southern Appalachians, the growth is so heavy that it must be brushed out at least once a year, to make it passable. Windfalls and down timber must be cleared away and the footway improved. Intrusion of new roads and new logging operations calls for partial relocation; markers and blazes must be renewed—the problem of physical trail maintenance is always before us, as is the somewhat kindred one of maintaining enthusiasm among the workers, some of whom may be prone to lose interest if we call the work done.

There is also the task of giving the Trail more widespread publicity, leading to its greater use by the public. But the greatest task ahead is that of carrying on to completion another phase of the original conception of Benton MacKaye, and it is in this that many of you, interested in public areas through which this Trail passes, may take a hand.

The thought underlying the Trail plan was not simply a path, a way to follow, and stop at that, but provided for a much broader utilization of the recreational possibilities so opened. The tramper would need some place to spend the nights en route, so shelters would be necessary. Some of these are already built and building, and more will be added to the list as well as more elaborate camping facilities at points of scenic and other interest, for those who might wish to tarry for longer periods. Some of these are springing up already, and that problem will solve itself as the need arises. But the more vital one, of protecting the Trail in its status of a wilderness walkway, of shielding it from any commercial invasion and the building of parallel or intersecting roads that might destroy its continuity, is before us. A solution, and one that if worked out will insure the perpetuity of the Appalachian Trail, is the creation of the Appalachian Trailway, and it is toward that end we are now working.

This Trailway, as suggested by Edward Ballard, of the National Park Service, at the last meeting of the Appalachian Trail Conference, would be a continuous strip of land two miles wide, one mile on each side of the Trail, under public ownership, to be forever withdrawn from any commercial usage, and where wilderness conditions can be preserved.

What a magnificent domain that would be, a strip of wilderness two miles wide and going over mountains and across valleys for more than two thousand miles, with a total area of greater than four thousand square miles, bigger than the combined States of Rhode Island and Delaware, or half as big as Connecticut, all dedicated to the use of the foot traveler alone.

The magnitude of such a project was enough to bring to life even the best of dreamers, but the task was started at once. There is abundant basis for a glimpse into the future that will show us the ultimate and complete realization of Benton MacKaye's dream.

STATE PARK DEVELOPMENT IN THE SOUTH

Alabama

PAGE S. BUNKER, State Forester and Director of Parks, Montgomery, Ala.

THE need of a park system in Alabama was recognized and discussed for some years, but it was not until 1927 that the State Legislature passed an act, usually referred to as the State Land Act, vesting the state's interests in parks in the Commission of Forestry and placing such areas under the administration of that department. This law provided a means of quite limited application by which, upon the approval of the Governor, certain state-owned lands might be segregated and devoted to the purposes of state parks. Under this law the Commission established the first state park in Alabama in 1930, without cost to the State. From that time, until the passage of the DeVane Act of 1935, most of the land for parks was donated by public-spirited citizens. By the spring of 1933, the State had acquired seven small parks.

With the advent of the Civilian Conservation Corps a tremendous impetus was given the state park movement in Alabama and extensive acreage was added to existing areas and several new areas were established. Thirteen of the Parks have been partly developed by the Civilian Conservation Corps. Other agencies that have been of assistance to the State are the Works Progress Administration and the National Youth Administration. At present there is a total of 15 State Parks and 2 State Monuments with an aggregate area of approximately 27,000 acres.

Alabama has peculiar natural advantages of extent and variety equaled by no other southern State. The climatic range from the temperate highlands of north Alabama with their winter snows to the semi-tropical shores of the Gulf of Mexico, the 21,000,000 acres of forest land in the State, the altitudinal range of more than 2,400 feet from the mountains and canyons of northeast Alabama to the deltas and beaches of the Gulf, and the wealth and variety of flora and fauna form a combination of recreational opportunities found in no other section.

In locating, designing and developing the state parks care has been taken to coördinate the scenic and recreational qualities with the peculiar needs of most of the people who will resort to each particular area. Any wholesome form of recreation, regardless of whether it may be exactly what students of social branches believe most desirable, should be given comparatively free play. The urge within the breasts of people to direct the lives of other people is very strong, but this impulse should be kept well under control. Where the recreational habits of people are firmly fixed the state park authorities believe that consideration should be had for local customs and expectations. This does not mean that what we may regard as better forms of recreation should not be made open to park visitors, but nothing like an attempt to force compliance with

external conceptions of what people ought to do is in contemplation. Holding in view these and other more obvious principles of park development and administration, Alabama feels that its state park system is on the way to achieving maximum benefits to the people of the commonwealth.

Georgia

CHARLES N. ELLIOTT, Director of State Parks, Atlanta, Ga.

THE legislation authorizing the Department of Natural Resources, and creating the Division of State Parks, was passed by the Georgia Legislature on March 5, 1937. The organization of the new Division was started on April 1, 1937, with the appointment of a Division Director. The Division of State Parks was created to open and operate the state parks as they became ready for public use. Last year the Division opened four state parks to the public. This year they will open the fifth. The money for over 5,000 dollars worth of equipment and for the operation of the parks, was made from charges for concessions and for special conveniences and privileges. Charges are made only for special services. Entrance to the park itself, including police protection, picnic tables, outdoor fireplaces, trails, roads, shelters, parking space and some of the games, all normal conveniences, is furnished free of charge. A family may spend a day in the park without spending one penny except for gasoline to get there and for picnic lunch.

By this charge for special privileges, three of the parks paid their own way last summer. We are expecting a much better season this year.

The Division of State Parks is coöperating in related work with other state and national organizations. We are working with the National Park Service, which is spending some $750,000 each year in Georgia to help develop the state park system. In addition to this construction, which is under the general supervision of the State Park Division, the Division is coöperating in the development of children's recreational areas, where the average boy and girl of the city, who would not otherwise have an opportunity to leave the city streets during the summer, may go for a week or two weeks, be taught to live with his fellows out-of-doors, be taught organized play in the development of clean minds, clean bodies and better citizenship. Three of those Recreational Demonstration Areas in the State total some 10,000 acres. They already have been enjoyed by hundreds of Georgia children.

The Vocational Division of the State Department of Education and the State Parks Division are collaborating in the establishment of a Future Farmers Camp in Newton County. There, 3,000 boys will camp for two weeks each during the summer months. These boys, who are from an entirely different group than those using the RDP areas, will be taught organized camping and play. They will be given lessons in Geor-

gia's natural resources and taught how to appreciate the beauty and the history of our State. They will be provided with enough land on which to plant and to study trees, on which to study soils and birds and animals and other natural resources of the State. They will have almost half a mile of lake front for boating and swimming and fishing. We believe that such programs lead any boy to better citizenship.

We are collaborating with the State Highway Department on a road-beautification program and in publicizing Georgia's beauty-spots, and in maintaining state park roads.

Some of the other organizations giving the Division of State Parks special services are the Health Department, which checks all plans for lakes and swimming pools, tests the water in all state parks twice each month, and gives the Division benefit of their knowledge and experience in all matters pertaining to health in the state parks; the University of Georgia, which is in the process of establishing a course in recreation to develop Park Superintendents and Rangers in order that the parks may be more properly operated and maintained, and in order that the park visitors may have the ultimate in service. The rangers taking this course will be given scholastic credit for satisfactory work in the parks during the summer months, and from the most satisfactory ones we may take our permanent employees. The recreation course is announced in the University Bulletin this year.

We are coöperating with the State Planning Board and the National Park Service in making a Recreational Survey of the State to determine what additional parks and facilities are needed for the public, which parks are being used and what facilities are most popular. The results of this survey will be reported to the Governor and to the General Assembly, with recommendations.

We hope to designate by markers the important historic sites of the State, which have not already been marked, and through the publication of a booklet, to give the Georgia people and others a deeper appreciation of our history and the part it played in the making of a nation.

We hope to preserve within the State certain select areas of scenic splendor, where commercial interests threatened to destroy them. Through its program to preserve scenic areas in the State, several new state parks areas have been acquired or are in the process of acquisition. These include Kolomoki Mounds, Providence Canyons, Little Tybee Island, Sitton's Gulch and Black Mountain. Plans are under way to enlarge several of the existing park areas. Legislation has been introduced into the Congress of the United States to enable the State to acquire 4,000 additional acres of land at Vogel State Park from the United States Forest Service. Approximately 6,000 new park acres were acquired during the last year.

Last year the state parks were used by nearly half a million Georgians and many out-of-state visitors.

The Division has given special attention to the publicity concerning areas under its control. Each day, requests come from all over the United States, asking for information about Georgia.

Many talks, state and national, have been made. In addition to a special newspaper and mat service to the weekly papers of the State, and special important items to the daily papers and news organizations as the Associated Press, special publicity features were put on as:

1. A full page of pictures of each Georgia Park, which ran for 9 weeks in the Sunday Rotogravure Section of the Atlanta Journal. This brought comments from all over the Nation.
2. A photographic contest of pictures in state parks. Pictures submitted from all over the State.
3. Name contest, selecting a name for the lake in Vogel State Park. Over a thousand names were submitted.
4. Magazine stories on Georgia Parks in such publications as the *Atlanta Journal Magazine Section*, *Architectural Concrete*, published by the Portland Cement Association; *The Georgia Builder*, Junior Chamber of Commerce; *Behind the Wheel*, an AAA publication, several unpublished articles for magazines as *American Forests*, *Atlanta Journal* magazine section, and others. These are expected to appear in the near future.
5. Materials prepared by request for several editorials in papers of the State.

Two groups were organized and sponsored by the State Park Division: the Butts County Historic and Archeological Society, to develop and support the museum at Indian Springs State Park, and the Georgia Park and Recreation Association, a citizens' recreational organization to promote state park and other recreational activity in Georgia. This latter group coöperated with the National Park Service in the acquisition of five historic sites between Atlanta and Chattanooga.

Florida

H. J. MALSBERGER, Director, State Forests and Parks, Tallahassee, Fla.

AN ACT of the 1935 Legislature established authority for the Florida Forest and Park Service to commence actively the acquisition, development, and maintenance of a system of State parks in Florida. There had been some work done toward the establishment of State parks as early as 1934. The development of the parks, however, actively commenced in 1935 when CCC camps, in coöperation with the National Park Service, were assigned to some of our park areas.

At the present time, we have nine state parks, of which six are in the process of being developed with CCC camps. There remain three areas undeveloped, but a CCC camp has been assigned to Florida Caverns State Park, commencing July 1. This office is also directing the development of the Florida Overseas Parkway, in coöperation with the National Park Service and the Overseas Toll and Bridge District. The areas dedicated for park purposes represent an acreage of 15,830 acres.

Highlands Hammock State Park, which was developed by the Roeblings and donated to the Florida Board of Forestry to be administered as a State park, is the only one at this time which is completely open for public use. Partial facilities are available at Hillsborough River and at Gold Head Branch State Parks.

The public facilities to be developed in these parks are consistent with accepted state park uses and cover the activities expected to be found on these areas. A very definite attempt has been made, however, to plan these facilities in conformity with the recreational activities participated in by the people who use the area. A blanket master plan has not been forced in the development of the areas; each one has been studied and planned as an individual unit.

It has seemed desirable, however, to adopt a policy of selecting areas which had outstanding scenic, botanical, recreational, or historical values which are unique within the State. Florida has numerous locations of this character, and it should remain our policy to accept only areas which meet these qualifications. It should be possible to plan our State park system with the idea of providing adequate recreational facilities within a reasonable traveling distance for our residents without deviating from this policy. Florida has a population of approximately one and a half million which is engaged primarily in agrarian pursuits. We are not confronted with a serious concentration of residents in industrial areas as are many States. It is possible to drive a maximum of ten or fifteen miles from any city and get into the great out-of-doors.

It is also necessary for us to select areas of outstanding attractions and develop and operate them in such a manner as to maintain the reputation Florida now has for being an outstanding winter playground. A portion of the tourists who visit Florida by the thousands during the winter months, have probably stopped at various state parks en route from Maine to Florida. They have a definite perception of the type of facilities which should be available and the manner in which they should be maintained. A director of state parks in Florida is definitely on the spot to provide as good or better facilities than are found in parks in other States. It is for this reason that it is my belief that our parks must be maintained in a way to attract visitors by providing first-class facilities and to be able in a proper manner to compete with the privately developed attractions in the State which have state, national, and in some cases, world-wide recognition. It is entirely possible that in meeting the problem of providing adequate facilities for the residents and tourists it will be necessary in some parks to develop the type of facilities which will satisfy both classes of park visitors.

It is also our objective to obtain additional beach and lake areas for the sites of state parks. There are approximately three thousand miles of shore line in Florida, and it is our purpose to preserve portions of these beautiful beach areas for posterity.

In concluding, it may be well to summarize the main objectives of the creation of a system of state parks in Florida. I would say that they should be located and developed in such a manner as to:

1. Provide facilities, at a minimum cost, for healthful recreation for leisure hours for the residents of, and visitors to, the State.
2. Preserve for continuous public use areas of outstanding scenic, botanical, recreational, and historical value.
3. Eliminate the possibility of future desecration and exploitation by private development of these wonder spots for which Florida is noted.

Mississippi

J. H. FORTENBERRY, State Park Director, Jackson, Miss.

IN MAY, 1934, an area for Mississippi's first state park was acquired. Any report that I might make relative to our accomplishments necessarily means that which has taken place within the last four years. It is true that plans, dreams and wishes for a state park system have been in the minds of certain interested individuals for a number of years, but it has taken the help of the New Deal and the present administration to initiate the move.

To this time we have acquired and set aside as state parks ten areas which are comprised of approximately 12,500 acres of land and water and they are scattered the entire length of the State. Two of these parks have facilities sufficiently developed that we have been able to operate them for the last two years. Four more of the number are now ready for the using public. The most recent addition to the parks of Mississippi is Magnolia State Park on the Mississippi Gulf Coast, located near Ocean Springs, Mississippi, a place which has served as a resort since the days when people traveled a hundred miles in an ox cart to enjoy the pleasant breeze of the Gulf Coast. The next possibility we have for a state park is one located near Jackson, Mississippi, the property for which the State Park Department is negotiating at present. This proposed park area is significant for its scenic and historical features, but is also of special interest relative to the use we propose to make of it. It is our plan to develop this area as a negro state park, the first area in Mississippi to be developed exclusively for their use. It is located approximately 12 miles from Jackson, near the center of the colored population of the State, and bids fair to be an outstanding recreational area.

It is our aim and purpose to place a park within reach of every citizen within the State. To do this it is necessary for us to select some areas that are not so outstanding in scenic beauty or historical significance. Yet the areas selected have responded very readily to protection, and within a short time all of our areas will furnish recreational features becoming to a state park according to our interpretation of the word. May I state in relation to the meaning of the word "state park," it is

our opinion that it is an area that has scenic and/or historical features, yet is typical of the State, and is in a location convenient to the using public; that has facilities encouraging the types of education and wholesome recreation most desired by its patrons.

The facilities made usable and in process of construction on the State Parks of Mississippi are along the line of other state parks in the Union, their planning being influenced, generally, by one advising department, the National Park Service. For the first three years, in our efforts to develop and conserve our state park areas, we enjoyed the pleasure of coasting along a level road, encouraged and advised, as well as financed, by the National Park Service. However, in the last 12 months we have had a different experience—we have learned the truth of the logic that it is easy to coast along in level territory with the help of others, yet you must make the hills under your own power, and in the last year we have marshalled our forces in an effort to make the grade. Our accomplishments have not been as much as we have desired, yet we review with a degree of satisfaction the fact that we have acquainted a large percentage of the people of Mississippi with the state park movement, as well as its prospective benefits. We have secured the advice and help of quite a number of influential citizens of the State of Mississippi, and have been able to get the first state appropriation for the support of state parks.

We realize at this stage of the game that our work on the state park areas has just begun—that there are many things yet to do to make these parks as serviceable as we desire. Although a number of these are in shape that we can invite the public and furnish a reasonable amount of accommodations, yet we realize that the parks will be more successful and more serviceable with the addition of more facilities and additional equipment. It is further realized that the citizens of the State of Mississippi must be more thoroughly acquainted with the possibilities of our state parks, and that funds for the operation and maintenance of these parks must be increased.

May I take this opportunity to discuss briefly some of the recreational features one may expect on a visit to the parks of Mississippi. You may enjoy a wide variety of scenery, as well as outdoor action. You may walk the trails of northeast Mississippi and view the landscape that is very rugged, almost mountainous, and listen to the waterfalls of the streams of this area. You may try your skill with hook and line in the fresh water lakes of central Mississippi that have a background of low, rolling hills covered with hardwood and pine. You may rest in a cottage located on the flat lands of the Mississippi Delta that has long been famous as the most fertile agricultural region of the Union. Or you may spend your vacation on the Mississippi Gulf Coast, in either winter or summer, since we propose to develop this park for year-round use. We have the balmy atmosphere for which the Gulf Coast is famous that you will enjoy during the winter. We also have the cool and refreshing breeze

that makes this place so inviting for visitors in summer. In visiting the parks of Mississippi we hope you will detect and enjoy the results of our efforts to make them typical of our State. You will be greeted with the hospitality which comes naturally to our citizens. You will be encouraged to join in the activities that Mississippians enjoy and you will without reserve or restraint feel the freedom of a welcomed guest.

It might be well to note that we of Mississippi are a rural people and that isolation from our fellows is not always desirable, therefore in developing facilities we have planned for gathering places as well as places of isolation. We think that with the proper combination of the two our state parks will become places for education in conservation, both in natural and human resources.

Louisiana

NICOLE SIMONEAUX, Secretary, State Parks Commission, New Orleans, La.

STATE park development in Louisiana was first undertaken by the Longfellow-Evangeline Memorial Park Association, which, as it was unable to raise the necessary funds, induced the state legislature in 1930 to appropriate 10,000 dollars for the purchase of 157 acres on Bayou Teche. In 1933-4 a CCC camp, under the supervision of the National Park Service, constructed a lodge, a water supply and sewerage system, a lighting system, picnic shelters, outdoor ovens, roads and bridges. More recently the State Parks Commission has constructed a caretaker's cottage and has secured over 150 pieces of furniture and utensils to furnish the old Acadian house in the park, which, according to local tradition, was once occupied by Louis Arceneaux (Evangeline's lover, Gabriel).

The State Parks Commission, created by Act of the Legislature in 1934, acquired Fort Pike State Park, which consisted of 125 acres purchased by the State of Louisiana in February, 1928, from the Secretary of War of the United States, primarily for use of a bridge-head. The area was transferred to the State Parks Commission by proclamation of Governor Aiken on November 15, 1934. Fort Pike State Park, which is now improved with wharves and table-and-bench combinations for picnickers, has long been one of the favorite sport fishing grounds for residents of New Orleans, many of whom keep motor boats there, as it is only 30 miles from town by concrete highway.

During the fall of 1935, the State Parks Commission acquired a 500-acre tract in Morehouse Parish in the northeast section of the State. The Crossett Lumber Company gave 400 acres and the Morehouse authorities purchased 100 acres. Through a CCC camp, under the National Park Service, the park has been provided with a lodge, 5 vacation cabins, water tower, tool house, garage, park roads and sewerage system.

The Bogue Falaya Wayside Park, at Covington, was opened in June, 1937, under a combined caretaker-concessionnaire plan. The land was donated by the city of Covington and the development was a WPA project. This little park, although only 13 acres in area, has over 1,100 feet frontage on the Bogue Falaya River, whose waters are fine for swimming, fishing and boating.

The Tchefuncte State Park and Conservation Reservation will include 5,800 acres, purchased from the Great Southern Lumber Company. The area allotted to the State Parks Commission for recreational purposes will consist of about 1,000 acres. The preliminary master plan for this area calls for two quite distinct types of development—one to include a public bathhouse to accommodate 1,000 people at one time, a clubhouse, a lodge with lounge, dining-room and dance floor, and individual cottages; the other to cater to organized groups such as Boy and Girl Scouts and other organizations and clubs. A separate beach and bathhouse will serve these groups. Bridle paths and necessary roadways leading to the buildings will be provided. In the park there will be a fine harbor for yachts and motor boats, and a fine white sand beach about 3 miles long. The park is characterized by large live oaks, magnolias and other hard woods and some fine specimens of virgin pines. National park officials have stated that this area will be one of the finest state parks in the United States, not only on account of its unusual scenic value but also because of its interesting historic background and its accessibility to so large a part of the population. It is said that the site of the park was visited in 1699 by Jean-Baptiste LeMoyne, Sieur de Bienville II, the founder of New Orleans.

The State Parks Commission has recently accepted an offer from the National Bank of Kentucky, in liquidation sale, of 4280 acres, to establish the Chicot Lake Park in Evangeline Parish. The Commission is negotiating for the acquisition of 1221 acres in small tracts. Of the total area of 5500 acres to be acquired, some 2500 acres will cover a lake which will provide aquatic sports and fine fishing.

The State Parks Commission received its first appropriation from the legislature for the fiscal period 1936-38. The budget for the fiscal year 1938-39 is $104,000 and for 1939-40, $85,500.

Kentucky

BAILEY P. WOOTTON, Director of State Parks, Frankfort, Ky.

OF KENTUCKY'S twenty-two parks and monuments but ten can properly be classed as parks. The total acreage of these parks is 6500; however, additional acreages will be added to two of them, bringing the total acreage up to 20,000. Two of the parks will have an acreage of about 7500 acres each; the others ranging from 87 to 1100 acres.

One of the principal parks of Kentucky is the Cumberland Falls State Park of 600 acres, embracing the Falls of the Cumberland River, the "Niagara of the West." This park, however, is in the center of a United States Forest area comprising some two hundred and fifty thousand acres. Therefore, a visitor in this park will enjoy all of the wooded area that he may desire, including the Falls and other spots of scenic beauty.

The Natural Bridge State Park, comprising 1100 acres, is in the center of a United States Forest area of perhaps one hundred thousand acres. The Audubon State Park contains a museum housing the priceless John James Audubon collection, paintings and prints, as well as his personal effects, these being the donation of the Audubon family. This park is located near Henderson, Kentucky, and will be formally dedicated about the first of October. The Columbus-Belmont State Park is situated on the Mississippi River and embraces the old forts erected in 1862 on the bluff overlooking the town of Columbus, Kentucky, and Belmont, Mississippi. Forts, redoubts and trenches have been restored.

Blue Licks Battlefield Monument embraces the historic battlefield of Blue Licks fought in August, 1782, between some four hundred Indians and one hundred and eighty-two white men. The Jefferson Davis Monument in Todd County, Kentucky, is 351 feet in height, being second highest in the United States. The battle site of Perryville is preserved in a monument. My Old Kentucky Home, the home of Judge John Rowan, where his cousin Stephen Collins Foster wrote the immortal "My Old Kentucky Home," is a State Monument. The old Wm. Whitley Home, the home of the celebrated Indian fighter, William Whitley, the slayer of Tecumseh in the Battle of the Thames, is a State Monument. This is a brick structure and the oldest brick house west of the Alleghany Mountains. Connected with it, also, is the Whitley Race Track, known as Sportsman's Hill. This was the first circular racetrack built west of the Alleghanies, if not in the United States, and on this were run the first horse races in Kentucky. Old Mulkey Meeting House is another. This is an old log church, having twelve corners representing the twelve apostles, built in 1797 or 1798. In the churchyard are the graves of many Revolutionary soldiers and that of Hannah Boone, sister of Daniel Boone.

Butler Memorial State Park, situated on the Ohio River at the mouth of the Kentucky, embraces land and the old mansion of the Butlers. The Butler family was a family of generals, some five of them having fought in all the wars from the Revolutionary down to the World War, and the old ones are buried near the old mansion.

Pine Mountain State Park embraces an area of some eight or ten thousand acres and is in the Pine Mountain region of southeastern Kentucky near Cumberland Gap. There is a skyline drive in this park some seven miles in length at an elevation of two to three thousand feet. It is one of the most beautiful of the scenic spots east of the Mississippi River.

Two other monuments of importance in the park system of the State are the Lincoln Cemetery and the Lincoln Homestead Country; the former is in Hardin County and in this old cemetery is the grave of President Abraham Lincoln's grandmother and those of two or three of his aunts and uncles. Lincoln Homestead Country is in Washington County and embraces the home of Abraham Lincoln, the grandfather of the President. Here also was where he was killed by Indians and buried. It is also the home of Nancy Hanks, her uncle and her cousin with whom she lived at the time of her marriage to Thomas Lincoln. Here also is the home in which Thomas Lincoln and Nancy Hanks went to housekeeping and where their first child was born and was buried, also the site of the woodwork shop where Thomas Lincoln learned the trade of carpentry.

Kentucky parks and monuments are financed largely by charging a small entrance fee to the most important ones and by meager appropriations from the Kentucky Legislature.

South Carolina

R. A. WALKER, Assistant State Forester, State Forestry Commission, Columbia, S. C.

THE South Carolina state park system was very rapid in its formation. Prior to the spring of 1933, there were no state parks in South Carolina. Today, there are 14 state parks, totaling almost 21,000 acres. In addition to these are two Recreational Demonstration Projects, totaling almost 17,000 acres, one of which adjoins an existing state park and will be operated and maintained together with the state park as one area, both of which, when added to the state park system, will give us a total of 15 state parks and 38,000 acres of land.

There is no doubt that the South Carolina state park system was born through the wonderful emergency conservation program of the President and through the help given us by the National Park Service and U. S. Forest Service, in the acquisition, development and operation of the areas.

Many of our areas were acquired and development work begun before an appropriation for state parks was ever received. We were operating state parks before the Division of State Parks was created and even now, after the legislature has recognized state parks and granted an appropriation, the funds are not adequate to provide proper maintenance and operation. We could not afford to wait for the State Legislature to recognize the need, for then probably we might have lost all opportunity for the acquisition of the land and for the securing of Federal help in development. It was a case of seizing an opportunity when it presented itself. We believe that we have a fine system of parks now and indications are that their need and tremendous value are being

recognized by the people of our State and especially by our legislature. We feel sure that sufficient appropriations will be forthcoming.

For the present fiscal year we received an appropriation of $12,500, but expect to spend $28,000, a balance of $15,000 being receipts from park operation. We have a good law in South Carolina which enables us to expend our receipts as fast as we make them. With this appropriation of $12,500, we entertained 460,000 visitors, which is a little less than three cents a person. Next year, we have an appropriation of $22,500, and expect to spend $50,000, the difference again being expected receipts.

The developments in our state parks are much like those in the state parks of our sister States. We have trails, recreational lakes, bathhouses, picnic areas, vacation cabins, trailer camps, camping grounds and necessary facilities, such as custodians' residences, access roads, and parking areas. These developments, thanks to the help and advice of the National Park Service, we believe are well done.

As for our state park policies, I believe we differ, at least along some lines. We do not believe in entrance charges. We consider human conservation as a most important part of the conservation angle of our state parks. We do not overlook the conservation of our natural resources or the preservation of our beautiful scenic areas. In fact, we hold these things in very high regard, but we feel strongly that if we should attempt to make our parks self-supporting—and we feel that we could—we would exclude the man from the lower income bracket and this is the man we want most of all, for he is the man who needs a moral, physical and mental uplift that can be given by the state parks, and he cannot afford to pay big money to get it either in the state parks or elsewhere. Do not misunderstand us—our state parks are not designed primarily for this type of man, but are designed so that he can be included. We pride ourselves on the fact that a man and his family can enter one of the South Carolina state parks, park his car, enjoy a picnic, roam through the woods and trails without charge. Of course, there must be charges made for special facilities and special concessions, but this is necessary and expected, and no one but a Bolshevik expects special service for nothing.

We do not ever expect to lease our bathhouse or cabin concessions. By running these facilities ourselves, we are able to insist on the strictest kind of discipline from our lifeguard corps and to insure at all times that our bathhouses and cabins are beyond criticism from the standpoint of cleanliness and sanitation. These, we believe, are most important points and no matter how strict, or carefully the agreement is drawn, when these facilities are leased, trouble is bound to arise along these lines. We have an excellent record, so far, with our lifeguard service, having taken care of over 60,000 swimmers last summer, with no serious accidents.

In the main, we run our own refreshment stands. This involves a great deal more trouble and detail work and we do not intend to con-

tinue indefinitely, but we have two main reasons for starting out operating them ourselves. First, we wish to set a standard of operation which can be demonstrated and, second, we wish to know the value of the concession in order to determine the amount at which we will lease it. We expect to lease concessions at three parks this coming summer. These are the parks which have dining facilities.

We are building up a permanent organization for our summers' operation, of men who have permanent winter work. Such men as college professors, football coaches, high-school teachers, etc., are available in the summer. Since our organization is so large in the summer and so small in the winter, this is the only method that we can see and in which good men can be secured for the summer recreational work and can be had each year. We employ two trained recreational directors, whose duties are to supervise the recreational activities in the parks and to promote, in the surrounding cities and towns, activities in the parks.

We have not chosen the easiest road, but our park policies have been carefully considered and we believe they present our idea of a true state park.

Tennessee

R. A. LIVINGSTON, Director of State Parks, Nashville, Tenn.

JUDGING from the natural beauty of certain sections of Tennessee, Nature, in the making of this State, surely had what we call parks in mind—places for rest, recreation and inspiration.

Under the direction of the National Park Service and with the aid of the CCC, the TVA, the Farm Security Administration and other Federal New Deal agencies, splendid progress has been made in the development of a fine system of parks in this State.

Prior to the organization of the CCC, some five years ago, Tennessee did not have a single state park area. Today, two parks—Norris and Big Ridge—have been in operation for two years and it is expected that six additional areas will be ready for use by July 1st of this year. In addition to these, seven other state parks are under construction. Upon completion of the program now under way, we will have a total of fifteen well-developed state parks, several of which are models and unexcelled elsewhere. These, of course, are in addition to the Great Smoky Mountains National Park, four national military parks, nine national cemeteries and a national monument.

Until the establishment of the Department of Conservation, a little more than a year ago, our State was able to do little in assisting Federal agencies in park developments. Facilities in our parks have been so designed and developed that all types of outdoor recreation are provided. These include camping, boating, swimming, fishing, hiking, horseback riding, nature study, vacationing in attractive cabins and many other

activities included under an organized camping program. To make such recreation possible, there have been developed in our state parks fourteen lakes, twelve of which have excellent swimming beaches; two artificial swimming pools; ninety-three vacation cabins; six lodges and several group camps. Each area also contains hiking and horse trails.

Vacations have been placed within the reach of thousands of boys and girls and adults as well, who heretofore, due to distance of travel, have been denied these privileges. Our parks are located so that they are not in conflict with each other and so that from any section of the State it is possible to reach some one of them in an easy two hours' drive. Citizens of this country, especially those who are interested in its conservation problems, in its progress and its becoming a better place in which to live, are fast learning of the need for establishing state parks; for developing them; for their proper administration and that necessary funds should be provided for the carrying on of this great work.

Director Fechner of the CCC has said:

> It would be utterly useless for the Federal Government to spend the millions that it is spending in the development of the beautiful state parks and then when the CCC Camps have completed their work and moved on to other projects, for the States to forget all about what had been done and let the lakes dry up, the trees die or the weeds grow up and destroy the value of all the work.
>
> I realize fully that maintenance of these new projects may run into real money. But the States need developed parks. They need state park systems and if they need them and desire them, they should be fair enough to provide for their maintenance after they have once been created, and improved.

We are convinced that the cost to the State of the proper operation and maintenance of our system of state parks will be more than offset by the saving which will be effected in the operation of penal institutions. Statistics are available which prove that properly supervised recreational activities for both adults and children, such as state parks have to offer, materially reduce delinquency and crime.

Considerable preliminary work has already been accomplished toward the establishment of entrance parks at state line crossings of our principal highways. It is planned that improvements at each entrance into the State of a primary highway will consist of an attractive state line marker, landscaping and beautification of the right-of-way for a mile or more from the state line while at some suitable location within this mile, a small area similar to a roadside park will be developed to include an attractive contact station. Under an agreement with the State Highway Department and the Highway Patrol, highway maintenance crews will be responsible for the care of these entrance parks and patrolmen in uniform will be on constant duty at the Stations to greet visitors entering the State and give them such information as they may desire concerning points of interest, etc. These patrolmen, while being furnished by the Chief of the Highway Patrol for a friendly and courteous purpose, will also be located at a strategic point if and when law viola-

tions should occur within the State as each Station will be equipped with either a radio or telephone.

In so far as the South is concerned, we believe that Tennessee is pioneering in the establishment of a negro state park. Necessary land has been acquired in Shelby County near Memphis and a colored CCC Camp is now moving onto the area to begin the project. This area will be developed exclusively as a negro state park with all types of recreational facilities usually found in a state park.

In closing this paper I wish to give you the words of that noble conservationist and naturalist, John Muir, who thirty years ago realized the value and the need for state and national parks when he said:

> The tendency nowadays to wander in wilderness is delightful to see. Thousands of tired, nerve-shaken, over-civilized people are beginning to find out that going to the mountains is going home; that wildness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life. Awakening from the stupefying effects of the vice of over-industry and the deadly apathy of luxury, they are trying as best they can to mix and enrich their own little ongoings with those of Nature, and to get rid of rust and disease.

T. V. A.

C. A. TOWNE, Tennessee Valley Authority, Knoxville, Tenn.

IN THE spring of 1934, a year after the TVA was established, arrangements were perfected whereby the National Park Service agreed to coöperate with the TVA in a program designed to furnish a demonstration in the planning, construction and development of parks. The Authority, in turn, agreed to sponsor the construction and operation of certain regional parks on lands acquired for reservoir purposes which would serve as demonstrational projects. Pursuant to this agreement the National Park Service assigned eleven CCC camps for work in constructing Big Ridge and Norris Park on Norris Lake, landscaping improvement in the Norris Freeway and the development of parks at Wheeler Dam and Muscle Shoals. Park development was also initiated at Pickwick Dam a year later.

Today we find these parks completed and in operation and serving as demonstration parks in the Tennessee Valley Area. A combination of factors has brought about this development. The TVA has been authorized to make plans and conduct experiments and demonstrations, leading to the promotion of legislation designed to promote the use of the natural resources of the valley, one of which, of course, is the Valley's vast recreational resource. These recreational resources, by fortunate coincidence, have been augmented through the construction of reservoirs designed primarily for the purpose of controlling the waters of the Tennessee River and its tributaries.

By developing demonstrational parks to make use of these resources, the Authority has fulfilled one of the mandates of the Act.

The effect of the construction of these parks is now being felt. In 1933 there were no state park systems in the southeast. Today every State touched by the Tennessee Valley has such a system in some form, and certainly the TVA demonstration parks have had a stimulating effect on the States, and have been an aid to the National Park Service in its remarkable and highly successful endeavors to assist in the establishment of state park systems throughout this region.

TVA is now reaching the end of one chapter in its activities in the field of park development. But its endeavors as a stimulating agent with respect to recreational development in the area have by no means ceased. A second chapter has begun. A CCC camp is now constructing Cove Lake Park on the shores of Norris Lake under plans approved by the Authority. The area in which it is working is owned by TVA but is now leased to the State of Tennessee which will operate the park.

Another CCC camp is just beginning its work on TVA land on the shore of Chickamauga Lake. This camp is under the administrative direction of the Tennessee State Park Department, which will furnish the plans for the development; and a lease has been drawn up conveying this property to the State of Tennessee which, in turn, has agreed to accept the responsibility for the operation of the park. The Authority's position with respect to the design of the park is that of consultant. Other developments of similar character are being discussed at this time with the State of Alabama. This chapter in the progress of recreational development in the Tennessee Valley is in many respects far more significant than the one just completed in that it recognizes definitely the local interests and responsibilities as vested in the various state governments in this region in the field of park management.

In forecasting future trends it is difficult to visualize the profound effect which the chain of lakes created by TVA dams will have on the recreational development of this region. Already these effects are becoming evident. They cannot be measured in terms of regional parks or in terms of areas bounded by public ownership. The ultimate picture of recreational development throughout the Valley will include the results of both public and private enterprise, and there will result a regional picture tremendous in extent and of great social and economic importance to the whole Valley. The Authority's job in the future will be oriented to the tremendous task of assisting in the guidance, in so far as it has the power, of these various developments so that the result will be coherent and sound. The Authority is in a position to help the Valley state and local agencies in the field of recreation with such planning and operating experience as it has acquired during the past four years. This constitutes the proper fulfilment of TVA's mandate given it by Congress to plan, experiment and demonstrate in the interests of the Valley's welfare.

PLANNING

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PLANNING

The Need for Planning

BEN H. KIZER, Chairman, Washington State Planning Council, Spokane, Wash.

IN THE New York Constitutional Convention of 1915, that eminent American statesman, Elihu Root, was presiding officer. At its opening session, the clergyman failed to show up and Mr. Root, on the spur of the moment, offered a prayer that ended with an invocation of the three great words of our American democracy: Peace, Justice and Liberty. On these three great words, as on wings, men's aspirations soar above the bitterness of conflicting interests that make up our daily work. But Peace, Justice and Liberty are still far from us in their completeness, because we fail to organize the kind of world in which Peace, Justice and Liberty can be fully realized.

The planning movement, too, has its three great words—not words that point to a distant goal or ideal, but words that describe a technique, a right method of approach to our problems. They are foundation words, not soaring words. Our three words are Research, the Plan, the Education. First, the careful, impartial study of all the facts, then the plan that can most wisely grow out of the research, and finally the educative process by which the plan travels toward adoption.

It is not just an accident or a coincidence that this planning movement should emerge at the same time that men are discovering that we are moving out of a world of scarcity into a world of potential plenty. Planning is the handmaiden necessary to a world of plenty. Without wise planning, we shall fail of our world of plenty, and instead move into a world of artificial scarcity, more cruel in its operations than the older world of natural scarcity.

For thousands of years men have lived in a world of comparatively simple human arrangement, a world in which the rugged common sense, the personal experiences of men were equal to almost any problem that confronted them. Members of legislatures and councils felt little need to give close or expert study to a given problem. The problem was generally simple enough so that their best judgment of it was fairly adequate. A sharing of the varying experience and wisdom of those in the assembly was usually enough to disclose a workable answer. No more was looked for.

But it is a commonplace to remark that this past century of intensive scientific and industrial growth has created a vastly different world, with vastly different and more numerous problems. We have grown so much into the habit of remarking that this present world is highly complex and interdependent that we have almost forgotten the driving, compelling force there is in this fact. Manifestly, the varied and complex problems, so numerous and with roots running so deeply into our interdependence, call each for close, thorough and impartial study. Many of them require study by men who do nothing else for the time

being, so that those who make the decisions may rely on this factual basis for their decisions.

Yet, our ingrained habit is to go on with this older technique of a far simpler day, to settle such complex problems in offhand opinions and emotionalized debate. Knowing but little of the basic facts, men fall back on the little that relates to their own immediate self-interests. This produces conflicts of interest, where there need be none, and ought to be none. For, in the larger knowledge of all the relevant facts, it will generally be seen that, in a world of plenty, interests need not be in conflict but each can be planned in support and re-enforcement of the other. In such a world there is enough for all if only we plan it so.

Not only have we lived in a simple world for these thousands of years, but we have lived in a world that was almost continuously arrayed in conflict. Because there was not enough to make all comfortable, each, excited by his fears, has fought with others for the lion's share. Now that earth's plenty unites with man's cunning to yield enough for all, we still use the technique of battle and strife to tell us what to do. We are so used to fighting that we cannot see that there is a better way—the way of planning. Even in our own democracy, where real swords are not used, nevertheless over every problem men draw their little tin swords of slogans, and go out to struggle and fight with party cries and recriminations as their weapons. Men appeal to fears and hopes, to cupidity and shortsighted selfishness, whilst the facts and the truth are ignored. In our ignorance, we help the industrialist at the expense of the farmer, we help the farmer at the expense of the consumer, we help the laborer at the expense of all three, and then find that none of them has been truly helped, because each is tied in interdependence to the other, and whatever hurts one hurts all. In short, in our ignorance of the facts we help each group in turn at the expense of the whole, and all suffer. If one fact stands out plainer than another, it is that we must study and plan for the whole, not for the group or the class.

Putting it another way, if these great words of democracy—Peace, Justice, Liberty—are to have their full meaning for us, what we need most to realize is that the technique of strife and battle to settle public problems belongs to that past age of scarcity. In a world where plenty can be realized, a coöperative study of the facts and a coöperative planning of policies is the only program men can use if they are to go forward. It is this working together for the whole, not that battle to seize booty for the individual, that alone can save our society. Whether we like it or not, we must adjourn our battling techniques. We must lay aside our tin swords. We must acquaint ourselves intimately not only with the whole of each problem, but with the problems of the whole. In a world of potential plenty, vain strife extravagantly wastes the plenty that should be shared, not seized.

And yet, we should be largely wrong if we pictured this need for

planning as only a late, modern need. Let me illustrate. Quite a number of years ago, a famous archeologist thought he knew, at last, where to excavate to locate one of the earliest beginnings of modern civilization. If any of his workmen really expected him to look for the Garden of Eden, they must have been greatly puzzled when he settled down on one of the most desolate and barren desert wastes of western Asia for his work. They dug for a long time, and quite deeply into the sands of the desert, when one day they came across the remains not only of an ancient but of a powerful, well-organized civilization.

When this excavation was complete after many months of toil, the head of the expedition again surprised his fellow-workers. He proposed that they dig still further, to see whether there were not buried below the level of this city yet another city, of a still earlier civilization. So this new work went on for yet other months. Finally, below the level of that first city, they uncovered evidence of a far earlier civilization. Here had been a much more primitive people, living far more simply and less well than in the first city.

When this second excavation was complete, a curious outsider asked the expedition's head how it came that on such a forbidding spot two successive civilizations had flourished and disappeared. The answer was about as follows: "Originally, this land was not a desert at all. Once many thousands of years ago, it was a rich and fertile valley, through which ran a considerable river. At either edge of the valley were hills covered with forests, and the valley itself was covered with succulent grasses. Accordingly, a primitive people, moving from lands worn out by their herds, found this choice valley and settled in it. As they increased in numbers, their flocks grew so that they cropped closer and ever closer the herbage, giving less and less opportunity for nature to protect and restore her natural cover. They then burned off the timber on the hill slopes, to increase the area for pasturage. As the roots of the grasses were more and more exposed by the grazing, the rains washed the rich topsoil of the valley into the river, the best of it to be carried to the sea. As the timber disappeared, floods began to be frequent, and the springs of water tended to dry up. The soil began to blow as well as to be washed into the river, and the huts began to be buried by the drifting sand. Finally, the last man was forced to leave this once fertile valley; for man, in his ignorance, had completely destroyed the earth's fertility and its ability to maintain him.

"Then hundreds of years went by. Gradually, grasses again obtained foothold, and first shrubs and then trees covered the slopes of the hills. Once more was formed Nature's balance between the rainfall, and the grasses and shrubs and trees necessary to absorb that rainfall and hold it within the earth, and a new humus began to take the place of the barren desert cover. Finally, after thousands of years, this valley was almost as fertile as before. Again, a wandering tribe discovered a new

fertile valley, and the second settlement, more civilized than the first, was built up. In time, it repeated the blunders of that first, primitive civilization, and in time the desert again reclaimed the outraged and ravaged land."

The inquirer looked about him skeptically. "Do you suppose the grass and the trees will ever get another foothold here?" he asked. "Not likely," was the scientist's reply. "You see, at last the hills have been so lowered and the valley so filled up that the wind, sweeping over it and moving its surface to and fro, gives no chance for new humus to form. But, more important, the stream of water that once flowed through this land is lost, below the surface, in the sands of the desert. So far as we can see, Nature has taken her final revenge for man's devastation, and the desert must remain as a permanent monument to man's folly."

Now, I have dwelt on this incident at some length because to me that racial experience is symbolic. It contains in a nutshell the long history of the despoiling of the good earth, from the birth of the race of men down to our present time. Always, tribes or peoples of men, finding their living standards sinking with the years that they have robbed the soil of its cover and of its fertility, have traveled onward, seeking new lands. Sometimes they have found a more primitive, helpless people, such as our American Indians, living on these undespoiled lands. These they have driven off or conquered. From Asia, the cradle of the race, they have spread to Africa, to Europe, then to the Americas, and finally to Australia. More than once they have turned back on their tracks, invading with their western civilization the less occupied lands of Africa and Asia. But always, they have committed the same old mistakes of spoliation over and over again, down to the present time.

We in the State of Washington, year by year, see the struggle-weary, travel-weary victims of the dust bowl trekking by the thousands into our midst, in the immemorial search of man for new lands, free lands. And we have to tell them: "Yes, we have farm lands, but they are occupied and they are not cheap. For you, there is no new land, no cheap land."

Here and there, in these newest sections of the West, we shall have in time fresh lands as the result of clearing and reclamation, but they will be neither free nor cheap. And that is the cry that goes up, not merely in the last regions of the United States to be settled, but all over the earth. "No more land! No more land!" From now on, man can no longer be a nomad, a wanderer, moving from despoiled land to fresh. The individual may move about, but as a people, we must stay where we are. That means we must adopt a permanent policy of care for this good earth, not a shortsighted policy of devastation. If we have forests and timber products, we must grow those forests as fast as we cut them. If we would eat the products of the farm and the garden, we must protect and restore the fertility of the soil, and so use it that neither wind nor water shall carry it away in excess. If we would eat meat, we must

see that our grass lands are not over-grazed. If we would have our drinking water unpolluted, we must clean up and keep clean our springs and our streams and our lakes. If we would have fish and game, we must protect the supply, and not allow more to be taken than the sea and the lake and the stream and the wilderness can afford to give us. In short, we must learn that the good earth is not a treasure-house to be robbed, but rather a rich storehouse, in which we must supply at one door what we take out at another.

All of this calls for careful survey and study, and for more careful planning for the future. We have thought in terms of the individual and of the present. We must learn to think in terms of the whole and of man's permanent well-being. It is this long-range thinking and study that is of the essence of this planning movement. If we do not plan for tomorrow's security and happiness on this earth, then the good earth will no longer be our friend, but our triumphant and chastising adversary. Looking at, not our remote future, but our immediate future, it is "plan or perish."

Nor is it alone with natural resources that research and planning must deal. And here may I utter words of limitation. There has been much outcry of late against national economic planning. If by this is meant administration and control of economic functions by or on behalf of those who plan, then it is clear that neither as a people nor as members of planning agencies are we ready for such over-all functioning. It is my own conviction, as I believe it is yours, that we who plan should avoid administrative functions, as far as possible, that we should look upon research, and non-political plans that grow out of research, as our job. But the last ten years have taught us, so that he who runs may read, that it is not alone with natural resources, but with human resources as well that research must deal.

It is plain to those of us who plan that we cannot study or plan for the conservation of our natural resources without considering most carefully the needs of those who use those resources. Whenever we approach a natural resource study, we find that it takes us at once into the study and research of connected policies of taxation, of public education, of public health administration, of policies of relief for the unemployed, the aged and the infirm, of the development of our public works and public improvement programs. In short, the needs and the capabilities of the good earth on which we live, and the needs and capabilities of us who live upon it, are so closely interwoven that we cannot study and plan for the one without considering the welfare and needs of the other.

Every thriving industry of America has its research and experimental laboratories. On these it depends for the testing of its materials, the improvement of all its processes of manufacture, for the research that devises new methods and better equipment. This successful use of the

laboratory method of research is, more than anything else, responsible for the marvelous advances our society has made in the field of manufacture and industry. To my mind this marks only the beginning of the far broader use of the scientific method of approach. Not long ago, I was in company with a group of men that included one of America's foremost business executives, a man whose name is widely known throughout the United States. The talk happening to turn for the moment upon planning and research, this executive remarked:

I think perhaps most of you know that our company spends huge sums annually in our research laboratories. We have recently made an important extension of this research method that is not so well known. In the past, each member of our board of directors was expected to pass upon all questions of administration, with only the limited knowledge that he had of it, plus some passing comment that one of his better-informed fellow directors or officers might offer. But our operations have become so far-flung and so complex that we have long felt that we were inadequately informed. Sometimes, we have discovered that we made serious mistakes in policy, simply because we didn't know, when we made the decision.

Some time ago, when we were discussing a subject connected with the work of our research laboratories, one of our members remarked how easy it was to decide this problem, because all of the facts were available to us through the research department's report. Another member said, "You know, I've been thinking for a good while that we ought to use this research method on many of these administrative problems that so trouble us. I have the feeling that we're using research in only one branch of our business, when all branches might profit by it."

Out of the discussion that followed grew a most important decision for us. We decided, then and there, that there was scarcely a decision to be made by our Board that would not be more wisely made if we could have preliminary research made upon it. Accordingly, we now have a research department that works directly for our president and the board of directors, just as our manufacturing division has its research. Before any executive problem comes up to the Board, it is carefully studied by our directors' research department. They impartially and intelligently collect all of the facts they think will have an important bearing on the question, and give us a report, with their findings attached.

To me, it is simply amazing how greatly these studies simplify our work, and remove the elements of speculation and doubt from our decisions. We used to postpone decisions that now we make promptly. We used to have hot arguments that now largely disappear because these facts control the decision.

Our distinguished guest here paused a moment, and then spoke quite slowly and emphatically, to add impressiveness to what he was about to say:

This new technique of research is the most valuable instrument of corporate management of which I have any knowledge. Mark my words, within a generation every successful business in America will have to adopt it. In my judgment, it is destined to revolutionize modern business methods.

No business in America, however great, is so complex or has so many unknown and unstudied factors as these problems of natural resources and human resources that confront our whole people. Here, most of all, research—the research that points to plans—and the plans that call for

the free use of the educative and informational processes is imperative. No government and no people can be wiser than their information. It is only by the orderly processes of research and planning and education that this necessary information can be gathered and disseminated.

Again, a word of limitation. This does not mean that our planning agencies should expect either to conduct all this research or to suggest all the plans. It is rather for us, I believe, to press for the adoption or the wider use of the technique of research and planning wherever public administration, legislatures or educational institutions can profit by it, or can most effectively render a service through its use. Executive departments of government, such as forestry, fisheries, highways, public welfare, and public utility commissions should have their own research staffs. Some of them have, or are making beginnings in this field. Similarly, our agricultural colleges and scientific schools have developed research departments, often pitifully underfinanced.

Wherever planning agencies can do so, they ought to challenge the public to the usefulness of these research agencies, and plead for more generous support of their activities. We should urge that more and more of our debatable public problems be committed to their study, instead of allowing the public to be the victim of the loud outcries and conflicting claims of self-interested propaganda.

But the most serious problems that confront our people, in dealing with natural and human resources, are broader than any single governmental department or the research of any single educational institution. There are, and always will be, wide gaps for planning agencies to fill in the research of these many agencies. Often, too, there is the pressing need that these various agencies should collaborate in research. Planning agencies here serve as rallying points, as coördinating and synthesizing agencies. We must not only study and plan, but we must encourage and assist all other appropriate agencies to use research and planning within their own fields, yet without duplication.

And this brings me to what I believe to be the final need of planning, the need to keep our activities well decentralized, and therefore well democratized. Our agencies should not think of themselves primarily as bureaus or departments of governmental administration, though we may work closely with administrators. On the contrary, we should live as closely as possible with the people whom we serve and our work should be carried on for and with them. Our philosophy is one of study, thinking, counsel, not of governing.

Therefore, I rejoice that so far our planning commissions of cities, counties, States and regions are composed almost wholly of men who retain their work-a-day status as private citizens, who are paid no salary, but rather serve because they believe in this principle of research and planning as one absolutely necessary for the health of our interdependent civilization. It is my hope that we may remain so, alike sympathetic

to the problems of the whole that concern the public administrator and acquainted with the problems of the individual.

Planning should never become wholly professional, though we badly need trained and professional staffs. If it does, then it will shrink to the obscure status of being merely another department of a governmental system that counts its departments by the thousands. Planning should rather stand midway between the trained public official who gives the whole of his working time to the service of the government, and the private citizen so immersed in his daily round that he is rarely conscious of his government save when it has something to give him, or to collect from him. And in keeping our planning democratic, we must think first of our local units of planning. If planning is to serve the democratic spirit of our nation, it can only do so as it uses and supports its city and county planning agencies. Without these basic units of planning, our work will in the end survive, once the novelty has worn off, only as another frill or decoration of government. In the beginning, we need the inspiration afforded us by the splendid efficiency of the National Resources Committee in its nation-wide surveys. We in the regional and state planning commissions are greatly strengthened and helped by that fine example. But in turn we must spend much of our time and strength in aiding our county and city planning commissions to do the best job possible for their communities. Planning cannot win public confidence unless many believe in it, many participate in it. By helping to plan, men come to believe. I hope that as our National Resources Committee acquires permanent status through favorable action by the Congress it can do much more, not merely by the example of its own work but by working hand in hand in a closer affiliation with state and local commissions. As members of planning agencies, we need constantly to bear in mind the wisdom of that fable of old Antaeus who was strongest whilst his feet remained on his mother earth. If we in the work of state and national planning neglect to build more foundations for planning in each community of city or county, we, like Antaeus, will ultimately be conquered because our feet have left the good earth.

And now, for the sum of the whole matter. The totalitarian state lives by propaganda, and the word of command. Democracy lives by untainted information and persuasion. By comparison with the swiftness of action of the totalitarian state, democracy sometimes seems to suffer, as we see it, reaching its decisions slowly, often with painful compromises forced by some noisy minority. Democracy then needs to fashion a newer and a sharper tool, to enable it to reach its decisions with less delay and more wisdom. Here, in research and planning, is that new tool that democracy needs. Let her use it wisely and well, and when every totalitarian state has perished of the slow poisons in their systems engendered by false propaganda, our democracy will still be standing, because of her power to know the truth, the truth that makes and keeps her free.

Planning a Housing Program

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PURPOSE OF REPORT

The intent of this report is to interpret the meaning of planning a housing program; point out the relation between the local housing authority and the city plan commission; and to suggest what information is necessary to enable the local housing authority or others to plan intelligently for housing.

INTERPRETATION

The Committee feels that the title of this report emphasizes the importance of planning rather than a housing program. Therefore, it is the meaning of planning as it relates to housing that should be clarified.

Since the primary purpose of planning is to forecast the future on the basis of available knowledge, it is necessary to assemble, analyze and disseminate data that bear upon the present and future development of the community. These data and their interpretation will enable all municipal agencies to organize their programs more effectively. Among these agencies are those that deal with housing.

Dwellings constructed and operated by private enterprise are regulated by such municipal agencies as the Bureau of Building Inspection, the Health Department and its Bureau of Sanitation, the Housing or Tenement House Division—when there is one, and the Zoning Commission. In addition, the work of private enterprise is to a considerable extent conditioned by the city plan.

Dwellings erected and operated by public housing authorities are, or should be, subject to the same principles and to the same conditioning. Private enterprise has been building the great majority of our houses and occupies by far the greater proportion of a city's area. So the significance of private enterprise in any housing program must not be

minimized. At the same time we must be alert to the significance of public housing which introduces a new public agency into the municipal family. Its relationships to the other members of the family should be clearly and early defined.

We in this conference are particularly concerned as to the relations of the new agency to the city planning agency. Perhaps we can best clarify our thinking by a gradual approach. All municipal agencies have a common objective that can be stated in general terms: the development of a better city. Each, however, has its own part to play in this development and for this part it is primarily responsible. The boundaries of the different parts will necessarily overlap to some extent and to that extent we must depend upon mutual understanding and a spirit of coöperation. Any attempt of one to impose its will upon another will arouse unnecessary antagonisms. So it will help if we can be clear as to what is the primary function of each agency.

As we understand it, the primary function of a public housing agency is to eliminate existing slums and to assure an adequate supply of good low-rent dwellings so distributed as to type (one family, multi-family, etc.), size, cost, and location that they will meet the varying housing needs of the population. In carrying out its program the public housing agency must take account of what is done by private enterprise. It must secure the coöperation of the Bureau of Building Inspection, the Health Department, the Housing Division, the Zoning Commission, all of which can aid in two ways: facilitating the demolition of existing unfit dwellings; preventing the erection of new unfit dwellings. For, obviously, the job will be endless if new slums are created coincidentally with the wiping out of old ones.

In the development of its program the public housing authority, like private enterprise, must conform to the city plan. The primary function of the city planning commission is to forecast the best possible physical development of the city. That it may do this it must assemble, analyze, disseminate, and interpret data that is of guidance value to every other municipal agency concerned in physical development. This is peculiarly true in the case of the housing authority which must fit its program to the pattern of the city. Consequently, there should be the closest relation between the city planning commission and the housing authority.

At the same time it is recognized that the housing authority requires data and interpretation of that data in fields that lie outside the province of the planning commission.

RELATION BETWEEN HOUSING AUTHORITY AND PLAN COMMISSION

It is not meant by the statements made in the preceding section of this report to infer that the city planning commission can or should assume all of the planning responsibilities of a local housing authority. It is

merely the intention of the Committee to point out that in the "planning" of a housing program the planning commission has a definite place in the picture even though the precise duties of a housing authority, as defined in the statute under which it is created, would seem to indicate that planning, as well as the site development, actual construction, and management of housing, was the sole function of the housing authority.

Because of its past years of experience and wider familiarity with community problems, a properly functioning city planning commission is better equipped to accumulate certain data through research and surveys than is any newly created housing authority. Likewise, it can be of considerable assistance in analyzing the assembled results of the survey.

The establishment of policies, the actual design of the houses, the plan for financing the program, the supervision of construction, and the ultimate management of the project, are necessarily functions and responsibilities of the local housing authority.

INFORMATION TO BE ASSEMBLED

Considered in its broadest aspect, the planning of a housing program should take into consideration housing that can and should be supplied by private enterprise as well as public agencies. Therefore, the data gathered must be comprehensive enough to be of value to anyone interested in housing.

The Committee concedes that for the purpose of justifying approval of a single housing project it is seldom necessary to explore such a wide field in search of supporting data. Very often, without the aid of extensive research, public officials intimately familiar with local conditions can determine the size, type, and location of a public housing project for low-wage earners and do as good a job "guessing" as the "experts" could "researching."

However, the planning of a long-range housing program requires a much more careful analysis of the factors that influence trends in urban development, and if it is to be of any value it must be predicated on a comprehensive understanding of local conditions, with specific knowledge of the following items: (1) Housing needs—both present and anticipated. (Requirements of population based upon family size and composition; living habits of various groups; family income and budget needs.) (2) Present supply of housing—quantity; quality; and structural condition. (3) Probable future housing to be supplied by private enterprise.

To secure such information it will be necessary to carry on extensive surveys if the data are not already available through real property inventories or housing studies previously made. Even though much of it may be available it probably will be necessary to make new surveys in order to obtain a knowledge of present-day conditions which may be different from those existing at the time of the previous investigation.

Especially is this true in the matter of vacancies in living units, rental brackets, and family income. Therefore, it is suggested that a house-to-house canvass be conducted to obtain information on those items for which data are needed.

Since the technique of the survey will have to be developed to fit local conditions and the type of personnel available, no method for gathering the required information is suggested. The National Association of Housing Officials in Chicago, will gladly furnish up-to-date information on techniques employed by the different cities where such surveys have already been made or are about to be conducted.

Good examples of housing surveys conducted under the supervision of planning commissions are the following:

Housing Survey, 1934-1935, Kansas City, Missouri; Housing Conditions in the Older Areas of St. Paul, Minnesota, 1934-1937; Minneapolis Property and Housing Survey, 1934, Minneapolis, Minnesota; Real Property Inventory, 1935, Boston, Massachusetts.

FACTUAL INFORMATION IN MAPS AND GRAPHS

The following data which it is suggested be available in map or graph form may seem like a large order, but much of it is usually available in the offices of various agencies of the local government. The composition of a land-use map is a rather big undertaking in any large city, but aside from its value as an aid in planning a housing program, planning commissions cannot very well carry on efficiently without such information; therefore, it is listed as "essential" No. 1.

The census tract map is necessary for the reasons specified and for the additional reason that it may not be possible to show some of the information by the spot map method. Often, agencies dealing in relief, family welfare, etc., do not care to have case work shown by residence location; therefore, these data may have to be tabulated by census tracts.

A. *Maps.*

1. Land use:
 The purpose of land-use maps is to show the present actual use of every piece of property in the city. Such information is of considerable value since it indicates the location of industries, stores, residences, schools, recreational areas, undeveloped sections of the community, etc.
2. Census tract map:
 It is recommended that an official census tract map be prepared in conformity with United States Census Bureau regulations. All information should be tabulated on the basis of census tracts. With such a map officially adopted it will be more easily possible to get a breakdown of the 1940 United States Census information.
3. City maps showing:
 a. Zoning.
 b. Transportation facilities—all types.
 c. Main thoroughfares, including trunk highways.
 d. Educational facilities, including churches.

e. Recreational facilities: parks, playgrounds, and parkways (existing and proposed).
f. Population density (spot map if possible), and population changes—increases and decreases, by census tracts.
g. Distribution of foreign-born nationalities (data from 1930 government census).
h. Juvenile delinquencies for past several years—spot map showing residence location by census tracts.
i. Juvenile truancies for past several years—spot map showing residence location by census tracts.
j. Vacant lands available for development (data from land-use maps).
k. Streets without water mains.
Streets without sewer mains.
Streets unpaved.
l. Tax delinquent property.
m. Location of firms employing ten or more persons.
n. Building ages—areas by census tracts where majority of buildings are:
under 10 years of age;
between 10 and 20 years of age;
between 20 and 30 years of age;
between 30 and 40 years of age;
over 40 years of age.
o. Housing types: one-family, two-family, three-family, multi-family areas, by census tracts, where a type is predominant.
p. Building construction since 1900. Spot maps showing location of each building. Maps can be made in series, each map showing five-year period.
q. Building demolitions. Spot map showing location of buildings razed, since 1900 or any year thereafter for which records are available.
r. Transition areas, by census tracts, where one use is giving way to another.
s. Blighted areas. Areas where living conditions are the poorest.
t. Relief cases for past several years. Spot map showing residence location by census tracts.
u. Health statistics for past several years. Spot maps showing residence location of deaths caused by various types of contagious diseases. The health commissioner can suggest those to which poor housing may be considered a contributory cause.
v. Family welfare cases for past several years. Spot map showing residence location by census tracts.

B. *Graphs or curves showing:*

1. Living units constructed yearly since 1910.
Number and type—one-family Detached-Semi Detached-Group or Row.
Number and type—two-family Detached-Semi Detached-Group or Row.
Number and type—three-family Detached-Semi Detached-Group or Row.
Number and type—multi-family Detached-Semi Detached-Group or Row.
Number and type—mixed occupancy Detached-Semi Detached-Group or Row.
2. Range in living unit construction costs yearly since 1910. For various type units. (Secure data from building permits.)
3. Number of owned homes by value (1930 census data).
4. Number of rented homes by monthly rental (1930 census data).
5. Annual natural increase in population (births minus deaths)—since 1900 or 1910.

6. Annual number of marriages—since 1900 or 1910.
7. Living units constructed annually—since 1900 or 1910.
8. Living units demolished annually—since 1900 or 1910.

WHAT THE PLANNED PROGRAM SHOULD INCLUDE

1. Desirable and practical residential land-use pattern in relation to comprehensive plan of development of region, including:
 a. Areas and housing which should be conserved.
 b. Areas where housing development should be discouraged.
 c. Areas which should be demolished or cleared and either rebuilt for housing use (low, middle or high income) or reserved for other uses.
2. Delimitation of field of public and private housing.
3. Establishment of plan for coördination of demolition with provision of housing.
4. Progressive scheme for timing and location of public housing projects.
 a. New construction.
 b. Reconditioned buildings.
 c. Combinations of above.
5. Measures for control of private housing, including:
 a. Zoning code.
 b. Building code.
 c. Housing code.
 d. Condemnation of unfit buildings.
 e. Tax foreclosure.
 f. Subdivision regulation (quantity and quality).
6. Measures for promotion of private housing, including:
 a. Voluntary demolition.
 b. Tax policy.
 c. Legislation affecting mortgage foreclosure.
 d. Legislation affecting investment of funds (life insurance, trusts, savings banks, etc.)
 e. Relation of public improvements, streets, transportation, and zoning to housing development.
7. Detailed planning studies for neighborhood conservation or rehabilitation where desirable.
8. Public education and propaganda.
9. Special problems.

AGENCIES PARTICIPATING IN PLANNING THE PROGRAM

1. Housing Authority.
2. Plan Commission.
3. Health Officer.
4. Building Commissioner.
5. Other concerned municipal officers.
6. Private agencies (housing associations, tax associations, real-estate associations, etc.).
7. Neighborhood groups.
8. Combinations of the above.

CONCLUSION

This report is not offered as the "last word" in planning a housing program. Its principal objective is to pave the way for the broadest kind of discussion on the subject. If it accomplishes that end, the labor involved in its composition will have been justified.

The Value of Planning to Public Officials

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THE attention of city planning normally is focused on important physical improvements, both public and private. Primarily, it has been concerned with such developments as public buildings, parks, playgrounds, new arterial streets, street widenings, rail and highway separations, plazas, slum clearance, sewer systems, etc. City planners assume the post of architects for the city—directing remodeling, expansion, general improvement. The purpose is, obviously, to achieve a master plan for a coördinated growth of the city, a growth which will embrace the greatest aspects of beauty, convenience, necessity and economy.

SCOPE OF REPORT

We all agree that there is much value to be gained from planning when that word is used in its widest meaning. However, to keep this report definite and within bounds, and also because it is a part of a program of a conference of city planning, we shall limit the meaning of the work "planning" to what is generally understood as "city planning" and confine our discussion to the value of the work performed by the usual city planning commission.

The subject may be divided into four main divisions: (1) The value of planning as a coördinating force in tying together the actions of the various departments within a single unit of government. (2) The value of planning as a coördinating force in tying together the actions of the various units or layers of government. (3) The value of planning to the functional work of a government. (4) Long-term planning.

COÖRDINATING THE ACTIONS OF ONE UNIT OF GOVERNMENT

There is no general accepted number of departments in any government. The Federal Government has ten cabinet members, and there is a

bill in Congress to create two more. State governments differ in number of departments, and so do city governments. However, for the purpose of this report let us consider the government as divided into six divisions: (1) financial, (2) public works, (3) legal, (4) safety—comprising both police and fire, (5) welfare, (6) health.

Each group of public officials accepts the responsibility of spending annually a large sum of public money for the benefit of the citizens of the community. Intelligent public administration requires first the preparing of a budget, by which the available funds are properly allocated to the various functions of government and the proper administration of the budget. The best and most carefully prepared budget may fail of its purpose due to poor administration. Although it may be the duty of the chief executive to coördinate the work of the various departments, there are certain phases of this coördination which can only be carried out after detailed study and the making of surveys. This character of work can best be performed by a planning commission. For example, the chief executive may coördinate the work of the public works department and the fire department, but a planning office can perform a very valuable service by mapping fire routes, and seeing to it that the entire thoroughfare is well paved; by studying the possible elimination of grade crossings. Many times a small sum of money expended by the public works department may greatly increase the effectiveness of a fire company.

Zoning is a subject most cities appreciate and are undertaking. But zoning laws generally are too elastic and too subject to easy change through political influence and maneuvering. Strict zoning will do wonders toward conserving real estate values and consequently tax values.

Likewise, the planning office may be helpful in coördinating the work of the finance department and the public works department. Public improvements cost money, but if properly placed may so increase property values as to pay for themselves. A live finance department aided by a planning office may map out an extensive public works program without seriously affecting the financial condition of the city.

We are quite sure that all chief executives who have struggled with WPA programs are aware of the value of a planning office in coördinating that program.

COÖRDINATING THE PLANS OF THE UNITS OF GOVERNMENT

We all live under at least four layers of government—federal, state, county and municipal. Each governmental unit has its own program developed by its own group of officials, one group many times working in total ignorance of the plans of the other groups.

A subject of ever-increasing importance is regional planning. This is relatively a new idea in civic plan work, but is eminently necessary

for large cities all over the nation. Advent of the automobile has caused large urban communities to spread far beyond their corporate boundaries into metropolitan areas. These metropolitan areas extend for miles through suburban towns, villages, the unincorporated communities fringing the cities proper. As the metropolitan population mushroomed, little attention was paid to planning. But it is not too late. The plan of the large city is no longer sufficient. It is necessary, but should now become a unit in a comprehensive plan for the city's whole metropolitan region.

Regional planning is to correlate public improvement throughout a large urban district. It calls for extensive coöperation and usually state enabling acts. But it is imperative. New York, Washington, D. C., Los Angeles, Milwaukee, and other large cities have regional plan commissions and are mapping out long-time programs of development so as to spot parks, highways, sanitary and utility services most advantageously for the entire area. The regional plan steps up to the city plan to cover an increasingly urgent need for the effective coördination of development affecting vast, sprawling communities.

Cities have already taken form, and improvements, though necessary, are extremely costly. A planned regional development would be much less costly and will prove enormously beneficial a few decades in the future.

The best example of lack of coöperation is seen when you drive along a beautiful state road only to find it enter the city through a narrow winding street in poor repair, or vice versa. However, the lack of coördination is not limited to highways; it exists in many other branches of government.

VALUE OF PLANNING IN FUNCTIONAL WORK OF A GOVERNMENT

Regardless of the efficiency of the every-day work of a department, unless that department has vision and performs its work with an eye to the future, it is not performing its full duty. True, a good street is a thing of beauty, no matter where built, but if placed in the wrong place, it may create a traffic problem.

Slum areas create a terrific drain upon the resources of all governments. More tax money is spent upon the area than is collected. The problem can be solved only by attacking it at the source; namely, the elimination of the slum. The planning office, by a detailed study of the area many times can uncover interesting statistics which are of great help to the police, the health and the welfare departments in dealing with the problems of the area.

Again, we all know that property values change and that increase in assessment lags behind increase in property values. Today every city is faced with a serious problem in the preservation of the value of its

downtown business section. Unless some solution is found for the parking problem, much business will gradually move to the outlying areas, and with it many millions of dollars of assessments will disappear from the tax rolls. Zoning, street widening, setting back curbs, parking meters, all may be of some value, but the assessor's office and the traffic division of the police department need assistance before it is too late. The planning office can be of real help to these departments.

LONG-TERM PLANNING

The public officials of any governmental unit change comparatively rapidly. There are a few outstanding exceptions, but, on the whole, few public officials are in office long enough to do any long-time planning which they expect to carry out. It is therefore all the more important that a long-time plan be prepared and that a city, for example, not be allowed to develop in a haphazard manner. Some of the advantages to be secured from long-term planning are:

1. Development of a city according to a definite city plan.
2. Control of subdivisions.
3. Reservation or acquisition of school sites, or sites for other public buildings for future development.
4. Establishment of supplemental building lines to protect future street widenings.
5. Coöperation between building department, city council, and planning commission to avoid issuance of permits for structures which would lie in bed of streets planned to be opened or widened.

Traffic Studies in Relation to City Planning

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THERE should be no more important subject than city passenger transportation to the professional man engaged in planning of traffic, or for that matter, to any public planning or traffic agency or even to the general public. It is hoped that this report will be of value, first in increasing the importance of the subject in the eyes of the professional men and next in securing a greater appreciation and intelligent attention to transportation problems from public bodies. The main purpose of our work is to produce something which will incite interest and cause discussion, and possibly create the desire to deliberate and report further. This present paper, then, can in a sense be considered an interim and not a final report.

To persons professionally experienced in planning and traffic matters it is obvious that traffic planning in its broad sense is a phase of city planning. It may not be so obvious that traffic planning or city planning does not necessarily, although at times it may very properly, include traffic engineering, as we accept the meaning of the latter term. Before proceeding further with this discussion it will be helpful to set forth and agree upon the broad meaning of each of the three terms: city planning, traffic planning, and traffic engineering. Your committee, therefore lists the following meanings which it has accepted for the present purpose:

City Planning: Planning the city's physical development starting with collection of data on existing conditions and ending with plans on maps for future development, including the location of businesses, industries,

single and multiple residences, parks, playgrounds, schools, public buildings, etc.; the location and widths of circulatory main streets and their general design according to type of abutting property; the location and extent of mass transportation services and other transportation facilities; the location and adequacy, under various forms of transportation, of terminal facilities at the central destinations of persons.

Traffic Planning: A phase of city planning primarily devoted to the planning of new or enlarged facilities for the transportation of persons and goods, or the terminal storage of vehicles used, with cognizance of the relative need for and feasibility of each separate mode of travel by private vehicle, by public vehicle, and by foot must be based on such city planning studies as population densities and trends, present and future business and industrial development and concentrated residential development, and needs special traffic studies of existing travel, quantitatively and qualitatively.

Traffic Engineering: Investigating the movements of vehicles of all kinds, including mass transportation units, over the existing street system. Includes analyses of spot congestion, vehicular delays and hazards and their causes, and the preparation of plans to improve traffic facility and safety, such plans dealing with physical improvements and control and regulation in existing streets and even dealing with enforcement and education. Includes also the curb regulation of standing or loading vehicles according to their effect on traffic movement or the conduct of business.

One could conclude, from the above descriptions of three professional activities, that traffic planning belonged to city planning without any question, and that traffic engineering might well be pursued independently or, in the case of an official planning agency, might be a distinct activity of that agency, since plans for new street facilities might be thought to depend somewhat on whether much or little could be done in facilitating movement through existing transportation channels by the application of traffic engineering.

Such a conclusion is doubtless correct, yet it has not been universally accepted by those professional men whose fields of activity lie in planning or in traffic. The reasons for such confusion as exists are: (1) Traffic engineers have occasionally carelessly adopted the term "traffic planning" to describe their activities, even though such activities are entirely within the field of traffic engineering as defined in this report, and (2) planners are in many ways unaware of the many details of traffic engineering that are only remotely, if at all, connected with planning endeavor.

TRAFFIC ENGINEERING AND CITY PLANNING

It will help at this point to review briefly the beginnings of traffic engineering and to list the more important studies quite commonly made by traffic engineers and the use to which these studies are put.

Beginnings of Traffic Engineering: When city street traffic congestion became acute in the middle twenties, and local police, engineering and planning officials were unable to devise or apply remedies, the professional traffic engineer came into being. He at first operated in a very narrow field; for instance, he restricted himself in the beginning primarily to the following activities:

1. Devising automatic control for vehicles at intersections and studying and recommending the method of operation of such control.
2. Controlling central district curb parking by time-limit parking zones, no parking zones, loading zones, etc.
3. Counting vehicular volumes and recommending the installation of stop signs on the more heavily traveled streets.
4. Revising traffic ordinances to bring regulations up to date.

Planners Were the First Traffic Engineers: Before traffic engineering began to be practiced as a profession separate from planning, and during the period of its infancy, the city planner was preparing major street and transit plans, he was preaching the gospel of the simple right-angled intersection of two streets, he was designing traffic circles and traffic channelization schemes for odd-shaped or hazardous intersections, he was, even in a few cases, laying out surface or elevated or depressed express ways for automobiles.

Your Chairman, who came to the Minneapolis City Planning Commission in 1922, can recall such details of work as the following:

1. Traffic re-design for streets and intersections, including the famous bottleneck on Hennepin and Lyndale Avenues.
2. Major street planning in relation to present and possible future location of transit lines, obtaining and plotting transit passenger volumes.
3. Intersection traffic counting and the analyses of individual movements to determine the feasibility of traffic signal installation.
4. Studies of necessary street improvements and intersection treatments in connection with numerous plans for the location of a civic auditorium.
5. Rearranging proposed subdivision layouts to obtain conformity with widths and locations of proposed major streets and to obtain simple traffic crossings of such streets.
6. Planning express ways and parkways.

At that time also other planning offices throughout the country, either because they were fairly adequately manned or because they were under the direction of engineers who took their planning with a practical turn of mind, were making traffic studies and preparing traffic plans. About the only other traffic engineering that existed in the early twenties was being done by engineers of companies who manufactured and sold traffic signals and devices.

Partly because of this historical background and partly because of lack of knowledge of the many details of traffic engineering practice in its broadest sense today, some planners still feel that traffic engineering is simply one small detail of city planning.

For a complete understanding of how highly specialized traffic engineering has become, some of its various ramifications will be discussed.

Traffic Engineering Now Highly Specialized: It is assumed that traffic engineering is concerned primarily with the investigation of traffic problems and application of remedies to solve these problems. These remedies have been classified as falling under the three E's—engineering, enforcement, education. As a matter of fact, engineering, or, rather, an engineering approach, is the basis of all three, when we are discussing traffic engineering.

Following are some of the engineering observations and records that may be required by the traffic engineer for a complete understanding of traffic behavior and the causes of congestion or hazard in a particular locality:

1. Relative traffic volumes on city streets.
2. Division of total street traffic by type: private vehicles, taxis, light and heavy trucks, transit vehicles and pedestrians.
3. Hourly, daily and seasonal fluctuations in volumes. Determination of peak hour and its relative severity.
4. Average vehicular speeds of each type of vehicle on specific routes and duration and causes of delays.
5. Degree of violation of driving rules and traffic regulations under various weather conditions and various physical conditions, such as illumination, type and visibility of regulation, street gradient, pavement, parking, etc.
6. Accident totals and classification by type, severity, reported cause and condition under which occurring.
7. Accumulation of accidents in specific locations and determination of repetitions from the same cause or under same conditions.
8. Street inventory to show widths, type and condition of pavement, gradients, corner sight obstructions, existing traffic regulations (signs, signals and markings), etc.
9. Results of tests of vehicles and drivers.

These are not necessarily all the records required, but they are typical. From them the traffic engineer determines such things as:

1. The benefit or detriment from existing stop-and-go traffic control under certain volumes and characteristics of traffic.
2. The need for other devices and markings—stop signs, slow signs, lane marks, speed signs, pedestrian islands, night illumination, etc.; the design of device as to effectiveness and cost; the exact location of each installed device and of lane marks and other paint marks.
3. Physical revisions needed: corner curb rounding, change of grade, removal of corner sight obstructions, illumination, etc.
4. Test and enforcement of vehicular repair: light adjustment and replacement, brake adjustment and replacement.
5. Items of enforcement and education necessary to concentrate upon: speeding, cutting in, driving out of lane, turning from the wrong lane, signal and sign violations, hand signalling, parking violations, jay walking.
6. Traffic ordinance revisions.
7. The desirable method of operation of continuous signal systems according to the necessities of the various types of traffic: transit, private vehicular, commercial, pedestrian.

8. The location and design of street car safety zones and pedestrian islands.
9. The regulation of curb facilities for parking and loading and the reservation of no parking areas for corner clearances.
10. The regulation of the times of delivery of goods in congested business areas.
11. The regulation of curb cuts for driveways to oil stations, parking lots, etc.

In his search for means of obtaining easier and safer traffic flow, the traffic engineer is also interested in the kind of people who drive automobiles, in the safety and ease with which these automobiles may be driven and in the safety and convenience of roadways to be used by these automobiles. He can use his traffic facts to good advantage in encouraging adequate examining and licensing of drivers, in suggesting improved automobile construction, and in recommending built-in safety and traffic facility when new streets are planned.

Modern Traffic Engineering Is Not Simply a Detail of City Planning: From our brief glance at the traffic engineer and his typical activities we can conclude that his profession is highly specialized along different lines from that of city planning. It would not seem desirable, therefore, to expect the city planner to include traffic engineering in his already broad field of activity. The traffic engineer is primarily an engineer; the city planner may not be, and therefore cannot be expected to be other than remotely interested in the minute details of traffic behavior and traffic regulatory equipment.

In the early portion of this report it was stated that "traffic engineering might well be pursued independently (with regard to city planning) or, in the case of an official planning agency, might be a distinct activity of that agency, since plans for new street facilities might be thought to depend somewhat on whether much or little could be done in facilitating movement along existing transportation channels by the application of traffic engineering." Following our description of traffic engineering activities, it is necessary to enlarge upon this statement. It should be obvious that the true demand for new or improved transportation facilities cannot be known until there is a determination of the maximum use that can be made of existing facilities. Traffic control improvements, parking abolition, lane marks, channelized intersections, the removal of unnecessary stop-and-go signals, a comprehensive system of boulevard "stop" streets, combined with intelligent and intensive education and enforcement, would improve traffic condition from 10 per cent to 25 per cent in most cities. By "improvement" we mean that accidents would be decreased and average speeds would be increased by these percentages, and that the general condition of congestion or intolerable street traffic delay would be relieved or even eliminated in some cases.

From our general discussion of traffic engineering studies and their uses it seems fairly obvious that such studies bear a definite and vital relationship to city planning, or, more specifically, to traffic planning.

In the absence of a regularly employed city traffic engineer many such studies have been and are being made by planning technicians, for the very reason that we have been stressing; namely, for determining the maximum use that can be made of existing facilities.

On the other hand, so many of the traffic engineering studies deemed necessary are so remotely connected to planning that we cannot conclude that traffic engineering should be included in the field of planning. One of the most valuable things any American city can do is to establish official traffic engineering under a competent city traffic engineer. The traffic engineer need not be assigned to the planning department, if such exists; in fact, it is an advantage to have him independent of such office, as such independence will attach more "importance" to his work and will give him a "free hand" in studying and advising on street traffic problems.

TRAFFIC PLANNING AND CITY PLANNING

For the present purpose, traffic planning deals with new or improved facilities for city circulation of persons and goods.

Transportation and City Development: Not until planners of cities and transportation facilities take into account the broad social and economic aspects of city development can it be hoped that a reasonable solution to the problem of adequate circulation of persons and goods will be reached.

The typical American city and its immediate environs consist of more or less definitely defined districts, as follows: industrial districts, central business district or districts, commercial districts, multi-family residential districts, single-family residential districts, large-lot estate or residential agricultural districts.

The character of the city is determined largely by the amounts of property within these districts and their composite pattern; also by the distribution or density of population by district, the kind of people found in this population and by the amounts and adequacy of facilities to service this population: streets, transit lines, utility and health facilities, schools, churches, recreation areas.

The process of city development has been marked by the progressive building up and the subsequent deterioration of land values. This is so largely because the various districts and their services were not planned during the period of development. City planners are agreed that this process not only is excessively costly but actually is destructive of wealth. They are likewise agreed that the chief problem now confronting cities is replanning to obtain desirable development without the attending consuming costs. In the area of "blight" contained within almost any city, there are large elements of cost in the development of the city. A principal replanning problem is the restoring of land and human values in such areas and the prevention of the creation of additional areas of similar character.

There is no doubt that the technological advance of transportation has been one of the chief contributors both to the good and the bad side of city development. Reciting the story of progress in city transportation would be repeating the story of the development of cities. The application of present or future transportation technology can, by the degree to which it is based on social and economic planning, carry this destructive and deteriorating process still farther, or it can correct partially the damage now done and contribute vitally to the rebuilding job that faces our typical American city.

The City of the Future: Most planners agree that it is inevitable that the face of nearly every American city will have to be remade in the future. They have a great deal of sympathy with advanced thought on ways of living in cities and of doing business and moving about, but doubt that the "city of tomorrow" is just around the corner. In the 1937 Oakland Traffic Survey the following statement appears in the introduction to "conclusions and recommendations":

> The city of the future will not be the city of today replanned and reconstructed overnight, but it should and will be the city of today readjusted gradually to meet new and changing requirements of the location and conduct of business and industry, living facilities, and the transportation of persons and goods. The most beneficial city and traffic planning will be that which makes the best of conditions as they exist, but which also recognizes the needs of future city and regional development and stands ready with projects designed to fill these needs as opportunities are presented.

Planners themselves have for many years in their own minds and in their professional deliberations summed up the evils of the city of today, or the city of the past which is still with us today, and visualized the city they would plan for tomorrow. But planning effort must be directed along the lines discussed in the above excerpt from the Oakland Survey, because we are dealing with an existing city. Furthermore, the planning of that city, in so far as it affects the developed territory, is not planning something new, but planning to readjust something that exists. In this respect the city planner looks somewhat askance on traffic plans whose scale is determined by the city of tomorrow, and he naturally asks: "What of the transition period? How long may this period be—1 year, 10 years, or 50 years? And in the interim, what of the city—shall it adopt the traffic plan of the city of tomorrow and hope to grow up to it, or shall it continue to be planned or readjusted to meet gradually changing needs and conditions in 'the location and conduct of business and industry, living facilities, and the transportation of persons and goods'?"

Traffic Planning Is One Phase of City Planning: If traffic plans are predicated on conditions such as those existing on Manhattan Island, where the "piling-up" process, first of concentration, then of transportation facilities to meet such concentration, is repeated again and again in a vicious circle, there is no telling where we may end. It is equally likely that either one of the following two conclusions could be drawn on

such a premise: The first is that we should revolutionize transportation to meet new and greater needs of concentration; the second is that we should plan to avoid the repetition of this situation elsewhere.

We of this committee assume that practical city and traffic planning dictates the second conclusion, and our report follows that premise: namely, that we are considering the planning of a large- or medium-sized city that should not develop as Manhattan Island has, and we are considering traffic studies or traffic activities as they relate to the planning of traffic and transportation facilities for that city.

In the first place it is apparent to everyone that persons or goods are transported in a city for the following reasons: (1) That there is a city and that persons must travel between points within the city, such as from residence to place of employment, or to shopping point, from residence to residence, and from business district to other business or industrial district for business reasons; that goods must also be transported from one district to another. (2) That the city lies on or adjacent to through travel routes and consequently travel on these routes must go through the city or must originate within the city and terminate outside of it.

The majority of all travel is that of the first class, intra-city, from one point to another point within the city. These districts or points within the city are served by sewage lines, by telephone and power lines, by gas mains and by transportation arteries and facilities. Future needs, in so far as all these facilities are concerned, must be based on a reasonable diagnosis of city growth and development along lines that are desirable, socially and economically.

Traffic Planning Must Not Ignore Transit: As long as we have the city of today with us, traffic planning, to be justified, must take serious account of all modes of transportation. For instance, surface transit by rail or free wheel cannot be ignored in planning facilities for carrying masses of persons relatively short distances, such as between the central business district and residential districts of the city. The criterion in this instance is relative numbers of persons transported by various modes of transportation, not the number of vehicles for which facilities are provided. In a recent Oakland survey it was found that from 7:00 A. M. to 9:00 P. M. of the typical week day, 342,000 persons were transported into and out of the central business district; 91,000 of these were in street cars and buses and 251,000 were in automobiles. The automobile passengers occupied 168,806 automobiles, but the transit passengers occupied only 7,410 transit units. Stated in a different way, for more direct comparison, the 7,410 transit units carried 91,000 passengers that would require 63,680 automobiles at a prevailing average car occupancy rate. In Chicago, in 1931, over a 12-hour period 10,203 surface transit vehicles carried 327,812 passengers into the central district, while only 203,916 passengers were carried by 119,951 private automobiles. In this case the transit passengers would require 192,500 cars.

The American Transit Association's records show that transit riding increases with the size of a city. In all American cities between 250,000 and 500,000 in population, transit riders were 48 per cent of the combined population, compared to 72 per cent for all cities between 500,000 and 1,000,000 in population and 98 per cent for all cities over 1,000,000.

It is of course well known to planners and traffic engineers that automobiles are inefficient users of street space in comparison with transit vehicles on the basis of persons carried per unit of space. This inequality becomes most acute in the central business district, particularly when masses of persons move to and from places of employment at about the same time each morning and evening of the business day. If all travel into the central districts of Chicago and Oakland were via private automobile and spread fairly evenly in time over the entire business day, the problem of congestion and delay would be bad enough; but the rush-hour movements of persons are usually two or three times the non-rush hour volumes, and under this condition the central districts' internal street systems and the avenues of approach to the districts would have less than the required vehicular capacities.

Transit travel in and out of central business districts has another distinct advantage over private automobiles, temporarily lost sight of during the boom in major street construction of a decade ago in many American cities, and completely ignored by some in their present-day advocacy of construction of facilities for individual transportation via private automobile. This advantage is that no central district parking facilities are required by transit units. In the central districts of all important cities at the present time, curb parking spaces are at a premium. After the adoption of all the regulations that can be thought of to increase daily turnover of curb-parked cars, there will remain no excess of short-time parking space at the curb.

It is probably not realized that the cubage of structure required to garage the cars of the occupants of the typical office building, if all such occupants should use private automobile transportation, would be as great as that of the office building itself. This amount of space would not even accommodate the patrons of buildings who originate outside the district during the business day.

Summary of Major Considerations in Traffic Planning: We have started with the major single terminal of transportation, the central business district, and have offered a few reasons why it is important to consider the type of transportation serving this district. Time does not permit of a thorough discussion of all considerations in traffic planning, but some major considerations will be listed to show the city planning nature of this subject.

1. Railroad locations and locations of freight terminals and passenger terminals, present and future, fix the point of origin of local transportation of persons and goods carried by railroad.

2. The same is true for freight and persons carried in by water and carried in on trucks and buses via through highways.
3. Location of residential districts, present and future, determines points of origin of the population moving about daily from these districts. Points of destination are central business district, industrial districts, local commercial districts and other residential districts.

FRED C. TAYLOR

In addition to the regular report which was submitted by the committee, Mr. Fred C. Taylor submitted a report which amplified some of the points in the original paper and added some new ones.

The report of the Committee on Traffic Studies in Relation to City Planning emphasizes the distinction between traffic engineering and traffic planning. Traffic engineering is primarily concerned with the facilitation of traffic movement along existing channels, while traffic planning relates to the broader field of city planning, and includes the design of new routes. The report stresses the idea that the demand for new transportation facilities cannot be known until the maximum use of existing facilities is determined by engineering methods and urges the establishment of a traffic engineer in the various city governments.

Divergent views were expressed on the relation of the traffic engineer and the city planning commission. The report states that it is not desirable to include traffic engineering in the field of the city planner, and that such work should be pursued independent of, or as a district activity of the city planning commission. Opinion was expressed that the city planning commission would be a definite hindrance to the free operation of a traffic engineer. Another view held that there was a danger that the traffic engineer would work independently against the interest of the commission. It was also suggested that in a medium-sized city the city planner and the traffic engineer should be the same person to assure the proper layout of subdivisions and street plans in accordance with traffic engineering principles. Mr. Ernest P. Goodrich, of New York, states that the planner would make a more perfect plan if he were also an accomplished traffic engineer; but since this is exceedingly rare it may be said that the best planners are those who know and make use of generalizations reached by traffic engineers, have a knowledge of such factors as traffic capacities of streets of various widths and uses, desirable curb radii, and similar items. The planner who includes zoning in his professional work should also appreciate and make use of knowledge of desirable corner clearance for accident prevention, and draft his zoning ordinance accordingly.

Traffic planning, consequently, must integrate its solutions with the inevitable provisions that are to be made for re-housing segments of the city's population, it must be geared appropriately to the migrating industrial and commercial areas, it must recognize the potentialities for change that lie in the region beyond the city's border, and it must recog-

nize the relationship the city bears to other cities and the rural areas of the State and adjoining States.

Only city planning can determine the social and economic necessity for these changes and can, if comprehensively undertaken and adequately applied, control those changes that are detrimental. Without city planning, traffic planning could not be directed to those improvements in transportation that would tend to correct past mistakes and avoid their repetition in the future.

The cleanest field for traffic and city planning lies in the outlying territories of the city and beyond. Ultimate street capacities here can be planned to bear a definite relationship to population expectancy; right-of-way widths can be determined by necessary ultimate capacities and the planned use of abutting property. There is every reason to believe that these territories can be economically served by strategically located modern automobile highways of the freeway type, flanked by parked strips, in residential territory, for protection of residential property against the disadvantages of motor traffic such as exist on the ordinary heavily traveled city street. There is equal reason to believe that, after sufficient growth, they should be serviced with transit lines, either rail or bus. In determining right-of-way requirements of widths and cross-section design, therefore, all of the following must be considered: (1) Population expectancy and ultimate necessary roadway capacity, (2) type of abutting property, and (3) present or future transit service.

If properly located and designed in advance for ultimate transportation demands, an all-purpose highway such as we are discussing can be developed in stages as demand for initial facilities and additional facilities arises. The initial treatment may be only a divided automobile roadway with, say, four lanes of total capacity, and with grade crossings at intersecting highways and "stop" sign protection at these points. Additional developments will be all or some of the following:

1. Inauguration of bus service.
2. Traffic signalization for high-speed progressive movement; still with grade intersections.
3. Widening of roadway by the addition of a lane in each direction, and the provision of pull-outs for bus stops.
4. Traffic re-design at the heaviest intersections for obtaining less turning interference with direct line traffic.
5. Improvement of the center strip for express rail transit. When this is done the bus line may be discontinued, or may be retained to give slower local service.
6. Grade crossing elimination, using property originally acquired for the ultimate right-of-way.

Transportation Requirements May Change: Your committee is not oblivious of the fact that our city of today has a street system that is not designed to give us the travel many would like to have; high auto-

mobile and transit speeds with safety from all parts of the city to all other parts. It may be that a growing demand for facilities that would offer travel approaching this ideal, accompanied by a willingness of the public to foot the bill, will revolutionize our transportation almost overnight. It seems much more probable, however, that traffic planning will take a different course; that there will be a de-emphasis on transportation facilities for the individual, and a concentration of attention on public transit which will carry masses of persons short distances cheaply, and on combined automobile and rapid transit ways which will enable a fast mass travel and individual travel between the center of development and outlying districts and eventually between other districts. Central district parking difficulties and the huge cost of correcting them should hint that the construction of super motorways primarily for individual transportation vehicles is certainly not the complete answer to any city's transportation problem.

Desired Objective of Traffic Engineering, Traffic Planning and City Planning: Our city must first justify itself on an economic basis; otherwise it fails to achieve the end for which persons have congregated. To be efficient, it must first have an effective system of communication, but it must also be healthy, be sufficiently attractive to be a pleasant place to live in and to do business in, and offer educational and recreational facilities and necessities and comforts such as water, electricity and gas. The need and cost of transportation must be balanced against the need and cost of these other facilities, and expenditures made accordingly; otherwise, economic justification of any one type of facility improvement is not present.

Persons cannot live in cities and have the same individual travel freedom of the open highway. They must submit to something less because the ideal cannot be economically justified. The objective of all three activities we are discussing is common: namely, to provide the safest, most convenient and most attractive transportation that a city can afford. To do this we need the efforts of the traffic engineer to plan the maximum and best use of existing facilities, and the combined efforts of the traffic planner and the city planner to plan an improved and lasting city, with improved and lasting transportation of persons and commodities.

The traffic engineer is the least dependent on either of the others; the traffic planner must be primarily a city planner, and traffic planning and city planning must go hand in hand if our objective of an improved and lasting city with improved and lasting transportation is to be achieved.

County, Metropolitan, and Regional Planning

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NEW DEVELOPMENTS IN THE PLANNING FIELD BEARING ON PROBLEMS OF MUNICIPAL PLANNING

EARLE S. DRAPER

CHANGES in the life and activities of the city during the past generation, intensified during the past decade, of necessity mean adjustments in the approach to city planning. Tremendously increased mobility resulting from rapid transport geared to personal use, instant intercommunication between far distant points, former luxuries of life become commonplace; these and many other manifestations of change force periodic re-examination of planning technique.

Our compact city of the gay nineties is gone—gone with the bustle, the hoopskirt and the horse car of an earlier period. It has burst its bounds and sprawled over the countryside, its outskirts, in large part esthetically ugly, uneconomic and of doubtful social value in their present form. Following the city beautification movement at the turn of the century, for several decades city planning was largely concerned with traffic in the city, provision for close-in recreation, zoning of critical areas, and other municipal problems. Except for a few cases and notable exceptions, city planning wore blinders and let the private developer creep up on the blind side and capitalize on the beauty, the accessibility and lack of restrictions as to land use in outlying areas. This has not been entirely or even largely the fault of planners. It is mostly due to the fact that corrective planning to overcome demonstrated evils awakens more

public interest and support than that more positive type of planning which seeks allocations of land use and services in advance of unhealthy development.

City and country life within the trade area of the city has seen such an increasing exchange of goods, services and land uses as to develop an integration of activity of which even minor disruptions cause concern. Major upsets are headline disasters. Such relationships are so well known to planners that no detailed comment is necessary. The results, however, are productive of functional changes. The city is now but a part of a social and economic organism, an important part—a nucleus—but merely a part. Administrative changes are taking place in recognition of the fact. Planning responsibility must accompany this organic readjustment of political units. Many city problems formerly capable of solution within the city limits by city authority are now so enmeshed in problems of larger political subdivisions as to require integrated solution. As an example, in a city that I visited recently, there were a good many traffic difficulties at an important bridgehead. Traffic and local readjustments have been only partially successful in helping the situation. The solution lies some twenty miles away in a planned relocation of through highways; the responsible agency with power to solve these local municipal problems is in this instance the state highway commission.

All this clearly points to the necessary integration of city planning with county, trade area and state planning. An attack on city planning problems must consider all elements, and many of these elements lie in the suburbs and some in the larger zone which I much prefer to call the area rather than the region.

Another important development bearing on problems of municipal planning is the effect of this integration of activities, federal, state and local, on administration. It must of necessity make an administrator more of a planner. The city official has many more relationships to consider now than in the past. In the matter of recreation, housing, health, and sanitation, and particularly all forms of public works, he must consider the part to be played by the state and federal governments. In instances of which relief and public works are the best known, direct federal grants to municipalities make Uncle Sam play an increasingly important rôle in the municipal government. And where our beneficent Uncle opens his money bags for the handling of city problems, he brings with him a system of checks and balances of involved contractual, long-time relationships that place the burden on the city to find out where the city is headed. Where the solution of local problems is of national significance, the Federal Government may give financial assistance, but in so doing the national government usually presupposes or requires a plan in the working out of the problem.

In suggesting that administrators become plan-minded, I do not mean that administration should swallow planning or vice versa. I do mean

that there must be a better understanding on the part of administration of planning technique and objectives, and, may I say, also on the part of planners of the ways in which plans may be effected. City planning boards need independent powers in their field, but much more effective planning will result if city councils, agency and department heads consider themselves as having planning as well as administrative responsibility. You are probably saying: Hasn't this always been true and desirable? Yes, but never so essential as today when every planning activity must consider the channels of three levels of government, federal, state and local, through which effectuation may come; and every move by an administrator must consider the future implications and relationships of the activity in his charge.

Nor does anything in this picture lessen the city's need for an independent regional planning consultant, familiar with all the regional implications of a municipal planning problem, serving perhaps more as a guide and critic than as the developer of detail plans. The rôle of such a consultant might well be to bring to bear on each problem the planning viewpoint of the trade area or of an even larger region. Surely municipal planning in this present day and time must be a function of government, and the city planner equally important as the city engineer. Administrators and planners have common problems to solve. Distance between them "may lend enchantment" but hardly understanding!

ORGANIZATION FOR COUNTY PLANNING

HUGH R. POMEROY

WE HAVE heard much about the "levels of planning." In fact, this term is the title of a paper by Mr. Draper in an issue of the *Planners' Journal* last year, and it is likewise used in Major Bessey's paper for the present session on the "Need for Regional Planning Legislation."

I am not sure that I like the term "levels" as applied to planning. We are inclined to take some word, give it a special application, squeeze it dry of any vitality of meaning, and use it as a preempted "lingo." The term "levels" indicates either one of two things, both bad. One is a compartmentalizing of planning, whereby functions, jurisdictions or procedures, with the organizations appropriate to each, are tucked away in respective pigeonholes of activity. The other is the conception of the "higher levels" of government as constituting superstructures of control.

Planning which is national in scope, beginning with the Nation itself and extending through sub-national regions, States, intrastate regions, metropolitan areas and counties, down to cities and villages, can be accomplished neither from the "top down" nor from the "bottom up" (and those are two more toy expressions). Planning from the top down is a centralization, which might be considered a mild form of central

governmental dictatorship. In that form I would not greatly fear it as a danger to that ever-changing thing, "our form of government." But it does pre-suppose an intelligence at the top capable of comprehending all the complexities of urban and rural life throughout the Nation. This might be possible if we were willing to impose a standardized pattern, but not if we are to maintain all the richness of variety of local habits of living and of community design and organization. On the other hand, nation-wide planning from the bottom up would be simply a compounding of provincial viewpoints (whether the provincial viewpoint of Sioux City or that of Boston) which by their very provinciality and their sometimes inherently competitive nature, could not produce a balanced national plan.

No, nation-wide planning can proceed neither from the top down nor from the bottom up, but must come from both directions. And since a current of influence or control cannot flow in opposite directions at the same time, the process becomes one of coördination and, to some extent, of integration, as is well indicated in Major Bessey's thoughtful paper.

This introductory discussion is not so much a trespass on the respective territories of Mr. Draper and Major Bessey as it is a setting for a discussion of the place of the county in the organization structure of planning.

Counties, territorially, are far from ideal, or even adequate, units of governmental administration. There are over 3,000 counties in the United States, practically all of them having been formed during a time when the distance to the courthouse was measured in terms of horse-and-buggy travel. Many counties are historical accidents, others are largely the result of local pride. Very few are logically laid out and some are largely vestigial, as in New England. The total number of counties in the United States probably could be reduced desirably to less than one-third their present number, and adequate intrastate regional planning, together with increasingly insistent evidence of the inadequacies of present county government, may break up the situation in time and result in a general re-alignment of counties. But the counties now exist as they are, deeply rooted in local habit, and even more so in local politics and patronage, and in the absence of any reasonable possibility of general reorganization, will have to be taken as they are for planning purposes. The good that counties can now accomplish in the field of planning will in no wise be impaired by subsequent county reorganization. In fact, the process of planning may actually facilitate the latter. Certainly, competent planning should lead to searching criticism of the effectiveness of current tools of operation.

Counties exist in a dual capacity which is most useful for planning: (1) they are administrative divisions of the state government and (2) they are themselves (in varying degree throughout the country) units of local government.

As administrative units of the state government, counties can serve as means of local expression and application of state planning, which in turn will bear the influence of national and interstate regional planning. Also in this capacity a county can serve as a coördinating agency for local planning units within its boundaries. Again, a county is not always an ideal local regional unit, but it is ordinarily the best practical and available one. In turn, counties may be grouped into intrastate regions for planning in fields of activity which transcend county boundaries.

As units of local government, counties either have the right to exercise the police power or are functionally capable of being given that right. And, of course, the police power is one of the three major instrumentalities for effectuating plans, for making them actually patterns for new development and for re-designing existing community forms. The three instrumentalities are: (1) the police power, (2) coördination of normal current activities affecting the physical form of the community and its physical services and (3) the long-term capital budget. The exercise of the police power by counties for planning purposes has varying applications, from its broad territorial application in rural zoning, to its interstitial application to unincorporate or similar territories around and between cities in metropolitan areas.

If a county as a unit of local government does not possess the right to exercise the police power, it must seek and obtain this right as a necessary instrument of planning. Where local town or township governments occupy all the territory of a county outside the boundaries of municipal corporations, the county is usually the best practical planning agency for such territory, but with police power controls exercised by the town or township governments. It becomes somewhat a question of expediency as to whether in such cases the function of the county shall be a somewhat impotent advisory one or a more active coördinating one, or whether the county shall be given the power to superimpose its controls over the towns within its borders. It can be said in general that the smaller the local planning unit, the less comprehensive will be the planning and the less effective its application.

The function of the county in planning may be summed up by saying that the county is ordinarily the smallest unit of government performing a coördinating function in planning, that is, among the units of government within its boundaries (on behalf of the State or on its own behalf), and is at the same time the largest unit directly exercising the police power in a comprehensive manner for the effectuation of planning.

The type of organization which is used for county planning should be that which is best suited, under the circumstances of the particular State or area, to the performance of the dual planning function of the county. There should be a planning board, or commission, of the familiar structure of non-official appointed members and ex-officio members, the latter being preferably the engineer, the attorney, and a member of the

governing body of the county. For reaching out beyond the county boundaries in its planning activities, the commission will participate in intra-county regional activities. For reaching in, in its coördinating function, the commission will assign special committees and staff members to specific tasks in this field and will conduct conferences of representatives of the agencies within the county boundaries; such conferences may be either functional or jurisdictional in scope.

A county planning commission should recognize several guiding principles in its work:

1. There must be a clear-cut definition of the county planning function.
2. There must be a defined program of work, covering the three successive steps of (a) surveys and research, (b) preparation of actual plans, and (c) designing and use of effectuating instrumentalities and procedures.
3. The commission must have a staff and budget which is adequate for the accomplishment of its program in an orderly and efficient manner. A planning commission cannot operate on demand services or "mooched" funds.
4. The planning commission must establish effective official relations (a) with the other officials of the county government with whom the commission must work coöperatively; (b) with the other agencies of government within the boundaries of the county, the planning activities of which are to be coördinated by the county planning commission; (c) with the county governing body, upon which the commission depends for its funds and only through which the recommendations of the commission can be made fully effective, and (d) with the planning agencies of the State and of adjacent counties, with which the commission should coördinate its activities.

The result should be, first, a broad county plan, taking a cast, or direction, from the state plan, coördinated within the intercounty region, and itself coördinating local plans within the county; and second, the effective application of the plan to the territory under the jurisdiction of the county, either directly, or in cases where there are intervening town and township governments, through the medium of these intervening governments by whatever process is determined to be best.

PARKWAYS, HIGHWAYS AND ROADSIDE CONTROL

FLAVEL SHURTLEFF

THE latest formula for parkways is also the last word in government coöperation. The land for these "elongated parks" will be acquired by the States and turned over to the national government. Design and landscaping will be by the National Park Service and construction by the United States Bureau of Public Roads.

Up to 1935 counties and metropolitan regions were the parkway builders. Their achievements, though few, have been notable, but the latest thing in parkways promises to be magnificent. The Blue Ridge Parkway, five hundred miles from the Shenandoah Mountains in northwestern Virginia to the Great Smokies in North Carolina and Tennessee, the Natchez Trace, five hundred miles from Nashville, Tennessee, to

Natchez, Mississippi, Andrew Jackson's route to New Orleans, were just a few years ago rather dazzling visions of the National Park Service. Now Congress has approved, much of the land has been acquired under the authorization of the legislatures of Virginia, North Carolina, Tennessee and Mississippi, and the Skyline Drive along the crest of the Shenandoahs has become the most popular scenic drive in America.

The design of the National Park Service requires a right-of-way of 100 acres a mile or an average width of 800 feet, plus 50 acres a mile for rights in land which will guarantee the full enjoyment of the rural scene. Entrances and exits will be limited in number and their location and design controlled by the national government. Access by private roads will be practically eliminated. There will be no frontage on private land for commercial purposes. Filling stations, inns, restaurants, all the business which caters to the traveling public will be on park land, the buildings designed and their operation controlled by the National Park Service. All outdoor advertising will be banished and such signs as are allowed will fit into the design of the structures. This is the ultimate in roadside control.

Parkways will be the preferred tourist routes. The experience with county parkways and the unquestioned success of the Skyline Drive make this a safe prediction. The National Park Service has already planned for an extension northward of the Blue Ridge Parkway to tap Pennsylvania, New York and tourist New England. Parkways through the scenic areas of America are sound economic ventures for the partnership of State and Nation.

The effect of these recreational routes will be far-reaching on the other highways of the Nation. They will revolutionize state highway policies. The precedents established in the new parkway legislation in the southern States will pave the way for new legislative concepts in highway building and highway protection. Freeways or limited access highways will be built through undeveloped land, and highway commissions will be given the authority to designate portions of existing highways as limited access ways. If wider rights-of-way and the limited-access principle are insufficient to control the nuisance of outdoor advertising, additional protection will be provided by a simple but comprehensive regulation: "There shall be no outdoor advertising device within five hundred feet of any parkway, freeway or limited access highway." The preferred use of parkways and limited access highways by the tourist travel will greatly lessen the value of other highways as locations for outdoor advertising, for the signs follow travel volume.

The protection of human lives, the conservation of the investment of public money in the roads, and the preservation of rural America dictate a fundamental change in highway policies. This change may be a slow and painful evolution, but it may come more suddenly than any of us expect. Rural zoning, whether by town or county ordinance, will play an

important rôle by regulating the use of land before the highway is built. Where counties and towns are slow in the performance of their duty, a roadside protective area will be established under state law.

Roadside control of the main travel routes of the country may well be perfectly realized in the next fifty years by parkways for scenic areas and by limited-access roads which will concentrate roadside business and banish outdoor advertising from the rural scene.

NEED FOR REGIONAL PLANNING LEGISLATION

ROY F. BESSEY

THE subject "Need for Regional Planning Legislation" is a very broad one. Its consideration requires some review of the nature of regions, regional problems, and regional planning.

There can be no general prescription for legislative needs for establishment, practice and consummation of regional planning—each case requires individual analysis. Study should cover such matters as the reasons and objectives for regional planning, the desirability of planning effort, its probable effectiveness, the scope of the planning project (the areas and subjects to be included in planning organization and activities), what organizational arrangements are necessary and feasible, what relationships should exist between planning and other agencies concerned, and, finally, what legislation is available and what is needed to do the work and make it productive.

The following statement is, therefore, designed to invoke broad consideration—of a subject worthy of serious attention on the part of persons of varied interest, experience and viewpoint—through a review of definitions, reasons for and objectives of regional planning, the nature of regional planning problems, the range of possible solutions of these problems, and some tentative conclusions.

DEFINITIONS

The term "regional planning" is used in connection with areas of widely different character. Undoubtedly the term "regional" is often used inadvisedly.

A general definition of a region would be a division of the earth's surface more or less delimited by common physical, economic or cultural conditions. While an area of considerable extent or importance is usually implied, regionality is not a matter of size, but one of possession by the area of qualities of geographic, economic and cultural distinctiveness, unity, completeness and balance, and a broad homogeneity that transcends local dissimilarities.

Regions will vary in type and extent from areas in which the limits are primarily geographic (as a drainage basin, or peninsula, for example) to those in which the stronger ties are derived from economic resources

and trade channels, or racial and political culture and tradition. They may range from small metropolitan or agricultural regions to a major subdivision or province of the nation. Some will be recognized as of rather definite limits, but generally boundaries will be nebulous. As a further complication, there are regions within regions—such as metropolitan regions within larger economic regions.

For purposes of this study, it seems desirable to classify regions somewhat as follows:

1. Metropolitan regions or areas: (a) Intrastate, (b) interstate.
2. Intermediate regions, districts, or areas—areas generally smaller than a state: (a) Intrastate, (b) interstate.
3. Sub-national regions—generally interstate.

In the general classification "metropolitan," would be included not only the larger or more important metropolitan areas, such as those of Boston, New York, Philadelphia, Washington, and so on (Seattle and Portland in the Northwest), but smaller cities and their environs (such as Spokane, Butte, Boise, in the Northwest)—all truly metropolitan in that they are centers of urban influence which penetrates out over a large area. For practical planning purposes, however, the metropolitan area covered should be considered as the immediate sphere of influence of the city and not the whole region with which it is associated. Areas including more than one center would also be included in this classification. For example, adequate area planning arrangements should not only provide for the city of Seattle and its immediate environs, but should provide also for the larger enveloping area including the whole Puget Sound district and its several smaller cities. The latter district would more nearly approach a region in character.

Intermediate regional planning units are of many kinds. There are, for example, the predominantly interurban Baltimore-Washington-Annapolis district in Maryland, and the urban-physiographic Puget Sound area in Washington, the physiographic-urban-agricultural Willamette Valley in Oregon; numerous areas delineated by type of soil and agriculture, such as the Palouse district in Washington and Idaho; and the physiographic Columbia Basin district in Washington (which is a particularly logical planning unit because it is affected by a single development project). Some of the districts of this class may be true regions; more generally perhaps they might be considered as sub-regions.

Some authorities prefer to call planning for areas smaller than a State "area planning"[1] or "district planning" to distinguish it from regional planning in the larger sub-national sense.

As yet, no fully adequate set of specifications has been developed to describe the elements essential in a true sub-national region. Certain large areas do, however, have sharply defined characteristics which have caused them to be recognized as regions. New England and the Pacific

[1]Earle S. Draper, "Levels of Planning," *Planners' Journal*, March-April, 1937.

Northwest are two prominent examples of the well-integrated and well-defined region suitable for a composite of functions. Elsewhere, the territory may not be so closely knit by geographic, economic and cultural ties. For some problems and functions the regional area may not entirely coincide with the area that must be considered in connection with other problems. It is, therefore, believed that the principle of flexibility should prevail in delineating these sub-national regions. Instead of trying to mark off rigidly bounded regions which inevitably break down, it will be better to establish sub-national regional planning centers with more or less general jurisdiction over the tributary areas[1].

GENERAL REASONS FOR AND OBJECTIVES OF REGIONAL PLANNING

The reasons why planning should be provided for and carried out in many various kinds of regions are numerous. Fundamentally, the definition of a region connotes community of interest and of problems. Almost invariably the important problems require for solution the collaboration of a number of governments.

The problems which should be considered on a regional or areal basis include such vital matters as urban and industrial patterns, drainage basin development and utilization, land use, agriculture, forests, transportation, water supply, sanitation, recreational facilities, power, utilities, public works, and so on. The best practicable solutions of problems in these fields in major areas, obtainable only through regional approach, are important not only to the area itself, but to the larger areas—state and national.

The broad objectives of regional planning might be summarized as the social and economic security and advancement of the region and, of course, the Nation. Among the means of attaining the main objectives are: (1) Knowledge of the region, its conditions and trends, and its position in relation to neighboring and larger regions, the States and the Nation. (2) Increased awareness of regionality—what it is, what it means to its people and what it means to the Nation. In other words, recognition of enlightened regionalism, including regional planning, as essential to progress. (3) Coöperative organization for planning with representation of the political and functional elements involved.

THE NATURE OF THE PROBLEM

As has already been indicated, problems will vary greatly with type of area and also with individual areas. Essentially, however, solution of each problem involves painstaking analysis of an area, of a pattern of physical, economic and social problems, governmental jurisdictions concerned, of means for collaboration of the various governmental units

[1]See *Regional Factors in National Planning*, National Resources Committee, December, 1936.

and divisions, of desirable coöperation with the various civic, technical, industrial and general public interests involved, and of the need, advisability, practicability, and form of a central planning organization.

In general, the legislative problem, which must be considered in the light of this fundamental study of the general regional problem, is one of constituting and implementing an organizational set-up for continuous regional planning.

These problems naturally vary greatly with the kind of region under consideration.

The Metropolitan Area Problem: For metropolitan areas, the problem is one of determining the extent and nature of planning arrangements rather than whether regional planning is required. The importance of this field of planning is evidenced by the fact that nearly one-half of our people live in metropolitan districts.

The urbanism report[1] of the National Resources Committee cites as objectives of such planning:

1. The checking of overconcentration of population, industry and urban activity in limited areas, and the ills attendant upon such over-concentration;
2. The judicious reshaping of the urban community and its region by systematic development and redevelopment; taking advantage of natural shifts to loosen up the central areas of congestion and to create a more decentralized metropolitan pattern; and
3. The extension of material and cultural advantages of urban life to a larger number of the population, and offering to the lower-income groups the somewhat less tenuous existence afforded by village and small-town living.

Lewis Mumford, in his recent analysis of urbanism and regionalism,[2] has, in effect, stressed the proposition that the city cannot be considered separately from the area of which it is an integral part, and has emphasized the great need of coördinate regional planning, if the city is to develop along rational lines and not move further, through an absurd overgrowth, toward decay and dissolution.

Although it may be safely stated that regional planning is required for almost any metropolitan area, it is more difficult to generalize as to the scope of such planning. The scope of functional consideration should include the people, their security, safety, health, conditions and standards of living, and communities; land and water and their resources; and the various facilities and services of transportation, water, power, sanitation, education, recreation, and so on.

Decision as to the geographic extent of such planning must be based on analysis of rather complex conditions. The influences of metropolitan centers extend over very wide areas. While there can be no formula for determining the extent of such an area, it is suggested that it be based upon analysis of the extent of the metropolitan pattern of transportation

[1] *Our Cities, Their Role in the National Economy,* National Resources Committee, June, 1937.

[2] *The Culture of Cities,* 1938.

and transit facilities; the limits to which people and goods move in the business, industrial, distributional and recreational daily life of the metropolitan center; the extent to which rural areas and the city are mutually interdependent; the extent to which land-use patterns are affected by the metropolis; the nature and relationships of outlying communities; and the lines at which the various influences of the center will meet those of other metropolitan centers of a self-sufficient and not satellite character.

Focusing consideration of the problem toward that of organizational arrangements and required legislation, there must be considered the present units of government involved and the extent of their interests. These will include the cities, counties, the State, or States, and the extent of federal interests. It is also essential to consider existing planning agencies and the planning agencies which should exist within the metropolitan area to make over-all metropolitan area plans reasonably complete and effective.

The Intermediate Area Problem: The general reasons for planning for a district or region smaller in extent than a State correspond roughly to those for planning at the metropolitan, and all other, levels. They have to do with the best use of the area's resources for human progress. Specifically, however, it might be well to stress the importance of planning for such areas as a foundation for comprehensive planning for the State or other larger area.

Solution of the problem of organization of such planning districts involves careful study of political units and departments. One or more States will be very directly concerned. Various administrative districts of the State may have important relations to the problem as will the activities of various state departments (such as highway, health, land, and so on). A number of counties, or other legal subdivisions of the States, will be encompassed. The federal government may be involved to a greater or lesser extent through land ownership, or its various interests in highways, waters, waterways, commerce, agriculture, forests, and other resources and activities.

The Columbia Basin area, in Washington, is cited as an example in this class of planning area, not so much as a typical case as one including a wide range of conditions and problems, and one illustrating the need and potential benefits of broad and unified plans.

The Problem in Sub-national Regions: The subject of planning for large sub-national regions is somewhat too broad, and the types and conditions too diverse, for review herein. The regional planning series of reports of the National Resources Committee[1] indicates the scope and variety of the problems.

Broad multiple-purpose planning should be undertaken for sub-national regions wherever such regions are sufficiently well defined to

[1]*Regional Factors in National Planning Development; Regional Planning, Parts I, III, V, VI, VII.*

permit continuing consideration of this kind. It is believed that for all areas of the country there should be study on a regional basis of the more critical problems, such as those of population, drainage basins, land use.

The problem of regional planning organization is one of effectively associating a number of interests in such planning. These may be grouped as follows:

1. The States, particularly their planning boards, together with the national planning agency.
2. The federal departments principally concerned with resource planning and development—particularly Interior, Agriculture, and War.
3. Other state interests—such as departments concerned with resources and their conservation, development and utilization.
4. Civic, business, industrial, educational, and general public organizations, institutions and individuals.

THE RANGE IN SOLUTIONS OF THE PROBLEM

The need and features of regional planning legislation depend on basic objectives, on the work to be done, the sphere in which it is to be done, and the kind of organization necessary to do it. Hence, each problem of planning organization and legislative requirement must have individual analysis. Reviews of actual procedures and experience in similar areas should be a part of the study, although it may be difficult as yet to find close parallels in past and current operations. Review of recent and current proposals for action in areal or regional planning should also be enlightening.

Metropolitan Areas: In the case of metropolitan areas, it is suggested that review of the procedures and experience of such metropolitan districts as Boston, New York, Philadelphia, Baltimore, Washington, Cincinnati, Detroit, Chicago, St. Louis, Denver, Los Angeles, San Francisco, and others, would be in order. Of these, Boston, Baltimore, Denver, Los Angeles, and San Francisco might be considered of particular interest as metropolitan areas lying within a single State; and New York, Philadelphia, Washington, Cincinnati, Chicago, St. Louis, and Kansas City, as interstate areas. Buffalo and Detroit illustrate metropolitan areas with international aspects.

The Massachusetts Division of Metropolitan Planning is loosely attached to the Boston Metropolitan District Commission, an agency of long standing charged with the administration of water, parks, and sewer facilities of the Greater Boston district. The division's functions are at present limited to development of coördinated transportation within the district. In fulfilling its duties, it is instructed to confer with the local planning agencies in the district. Recommendations and plans are submitted to the Commonwealth.

The Niagara Frontier Planning Board, another official board, established in 1925, has been engaged in area planning in two New York counties in the Buffalo metropolitan district. This board operates under

state legislation providing for the establishment and maintenance of regional planning boards by and with representation of a county or counties and the cities, towns and villages in the counties. Official reports are made to the State.

In several instances, it has been found practicable to provide for official metropolitan planning within the county governmental structure. The organizations and accomplishments of the Los Angeles County Regional Planning Commission, Milwaukee County Regional Planning Department, Allegheny County Planning Commission (Pittsburgh), Monroe County Division of Regional Planning (Rochester), and others would throw light on the advisability of this approach. It will be obvious, however, that the county boundary will rarely coincide with more logical metropolitan planning limits.

In general, past arrangements for over-all planning for interstate metropolitan areas have been based upon unofficial and coöperative "regional planning associations." For example, New York has had, since 1921, the Committee on a Regional Plan of New York and Its Environs, and its successor the Regional Plan Association, Inc. (established 1929).

Planning in some important fields in the New York metropolitan district has been undertaken by the official Port of New York Authority. This organization, created by interstate compact, is responsible for both planning, construction and operations, and has, most notably, carried on planning work in the fields of port development, interstate transit facilities, bridges and tunnels.

The older unofficial metropolitan planning bodies in the United States include those for the Chicago and Philadelphia areas—the Chicago Regional Planning Association and the Regional Planning Federation of the Philadelphia Tri-state District. Each of these areas encompasses parts of three States, and a considerable number of counties and municipalities.

Review of the nature of coöperative agreements and legislative arrangements made by public bodies with the unofficial planning associations would be a logical part of a broad study of legislative requirements for metropolitan planning.

The National Capital Park and Planning Commission, responsible for planning in the District of Columbia, is authorized by act of Congress to collaborate with planning authorities in the near-by States of Maryland and Virginia.

In considering the possibilities of organization and enabling legislation for metropolitan district planning, it would be well to review, briefly, current proposals in the light of the fundamental needs. Basically, what is required for such planning is an association of city, county and state planning boards recognized and implemented by action of the state legislature and ordinances of the municipal bodies concerned. In the case of the larger and more important metropolitan areas, particularly

those of interstate character, some form of representation of the federal government would be desirable, for reasons already reviewed.

The urbanism report of the National Resources Committee and its Urbanism Committee recommends measures pertinent to better planning for metropolitan districts, and the report of the St. Louis Regional Planning Commission and the National Resources Committee gives constructive suggestions.

Intermediate Areas: In the case of planning for intrastate and interstate regions, or districts of extent less than state-wide or sub-national, the range of solutions is somewhat similar to those of metropolitan districts, although in some cases the organization problem may be somewhat less complex. The substantial elements of solution are, again, an association of planning agencies of counties, the more important communities, and the State. In an association of subdivisions of the State, the coördinating and catalyzing services of the State will be essential. In most cases, provision for some form of assistance on the part of Federal officers will be desirable.

Current illustration of regional planning of this kind may be found in many parts of the country. Planning work for a large intrastate area has been initiated by the Maryland State Planning Commission with reference to the Baltimore-Washington-Annapolis area. Recommendations of this study are referred to hereafter. Among sub-state district planning boards are such organizations as the official Niagara Frontier Planning Board (previously mentioned) in New York, and the Chariton River Basin Planning Board, an unofficial, coöperative, six-county grouping, in Iowa.

The state and local planning enabling acts of various States provide for the participation of local planning bodies in district planning. New York law provides that any county or counties and the cities, towns and villages therein may establish a regional planning board to consist of representatives of such county or counties, cities, towns and villages. The municipal corporations concerned are authorized to appropriate and raise, by taxation, money for expenses of such regional planning boards. These boards are empowered and directed to study regional and community planning needs, to prepare plans to meet them, to promote community or intercommunity planning, to collect and distribute related information, and to report annually to the governor. Idaho law empowers planning commissions of two or more adjoining counties to coöperate in formation of a regional planning commission for the making of plans for a region defined as may be agreed upon by the commission. Expenses are to be borne by the various counties in the region as may be agreed among the counties and the commission. Provisions of Washington law relating to regional or district planning commissions are similar to those described for Idaho. The California Planning Act of 1935 directs the state planning board to divide the State into inter-

county regions, with a regional planning commission for each, consisting of representatives of the constituent county planning commissions.

Other existing legislative provisions for district planning may be found in broad conservancy acts, such as the Ohio Conservancy Act and those patterned after it. Such legislation, designed for conservation, water control and related purposes in large areas, would carry authority for district planning work of considerable scope.

In consideration of possible solutions of problems of this kind, attention is invited to the current suggestions for action reviewed in connection with metropolitan regional planning; these are quite generally applicable to the larger areas. The recommendations of other reports on planning will be of interest. The Baltimore-Washington-Annapolis report[1] recommends: "State legislation creating or extending jurisdiction of local planning agencies in the area surrounding the three cities; state enabling legislation giving cities, counties and communities more adequate authority to implement planning agency recommendations by local laws; state enabling legislation to extend powers of state and local administrative departments; state and federal legislation to permit necessary state and federal developmental and financial assistance to projects in the area; establishment of the Baltimore Metropolitan Commission to cover the whole B-W-A area in connection with existing planning agencies; establishment of a coördinating committee sponsored by the State Planning Commission to assume responsibility for coördinating area-wide planning proposals; preparation of a fiscal program with priorities for various projects and provision for apportionment of funds among local, state and federal agencies."

A Pacific Northwest report[2] on the problem of conservation and development of scenic and recreational resources of the Columbia Gorge in Washington and Oregon recommends: "Coördination of planning and design affecting scenic and recreational values, development of outdoor recreational facilities, etc., through an advisory, joint, interstate-federal Columbia Gorge conservation committee." Parallel legislation would be required in the two States to make such a committee effective.

Sub-national Regions: In the field of sub-national and interstate planning, there is an especially wide range of possible solutions. Current activities and trends have been discussed at considerable length in reports of the past few years, notably the series published by the National Resources Committee. The subject was also discussed at some length at the last National Planning Conference.

Current activities in comprehensive regional planning for interstate-sub-national regions are carried on by three types of organizations—the corporate regional authority, the voluntary association of the planning

[1] *Regional Planning—Part IV—Baltimore-Washington-Annapolis Area,* Maryland State Planning Commission, November, 1937.

[2] *Columbia Gorge Conservation and Development,* Pacific Northwest Regional Planning Commission, Columbia Gorge Committee, 1937.

agencies of the States and the Nation, and by interstate coöperation commissions.

Broad planning for the Tennessee Valley, in several of the southeastern States, is a responsibility of the Tennessee Valley Authority, a Federal corporate agency, which is also responsible for the construction, maintenance and operation of dams. While a specific place for state representatives is not provided in the organic structure of the Authority, it has endeavored to fit its work into the existing pattern of local, state and federal government, seeking the participation of other agencies affected by a problem.

The Pacific Northwest Regional Planning Commission, of the second type, is composed of the chairmen of the state planning boards of Washington, Oregon, Idaho, and Montana, and the regional chairman of the National Resources Committee. The state planning enabling acts authorize, in general terms, such coöperative relationships. Other federal and state agencies concerned, and various technical, civic and industrial interests, are represented through advisory technical committees. The New England organization is quite similar.

In some other regions of the United States, regional planning organization has been formed through the device of interstate coöperation commissions such as the Interstate Commission on the Delaware Basin, the Interstate Commission on the Ohio Basin, and the Interstate Commission on the Red River of the North.

Although various organizational methods and arrangements are possible and desirable, there are certain elements considered essential in any organization for this level of regional planning: The planning organization should be some kind of an association of the federal government and the States; a joint body or, if a federal agency, one with definite provision for state representation. The national planning agency and the state planning agency should be represented. There should be provision for suitable technical and advisory committees in the regional planning agency to cover various functional fields and to provide for representation of agencies and interests concerned. There should be provision for an integral or coöperative relationship to the board on the part of the federal departments concerned with conservation and development. There should be legislative and administrative recognition of the need of participation in regional planning activities by the federal agencies referred to. There should be a permanent national resources planning board, with authority to foster, assist and participate in regional planning activities and to coördinate regional planning between regions and the federal government and between federal agencies.

Review of recent and current proposals for such planning would be essential to a thorough consideration of the possible measures. Most fundamental are the suggestions of the National Resources Committee in its report on Regional Factors in National Planning.

The regionalism study emphasizes the fact that a single type of regional organization is not recommended and that each solution should be based upon the comprehensive view of the policies of all of the governments in the area, the constitutional powers required, the incidence of benefits and costs, the area in which the organization will operate, and the functions to be performed.

The study of organization for regional planning and development by the Pacific Northwest Regional Planning Commission recommends: "Continuing regional planning activity and organization, through the coöperation of state planning boards and federal officials in the area; a separate federal corporate agency for the distribution of power from the federal projects on the Columbia River." In addition, the Regional Planning Commission recommended in this report the continuation of construction or development activities under the agencies at present responsible therefor, with a joint coördinating committee.

The report of the New England Regional Planning Commission[1] stresses the importance of the establishment of a permanent advisory national planning board.

The study of regional planning with respect to Alaska[2] recommends that any regional planning legislation adopted for the United States should provide for individual consideration of an Alaska Region.

A comprehensive study of regional planning arrangements and legislation would also require careful review of the proposals of various regional planning and conservation bills of the present Congress and reports of hearings on this proposed legislation.

CONCLUSIONS

Some tentative conclusions as to regional, district, or other areal planning, and legislative needs in this connection, briefly summarized as follows, are proposed for wider consideration and discussion:

1. Enlightened regionalism, with fundamental understanding of the nature and position of the region, and with the application of scientific survey and analysis, foresight, and coöperation to the solution of its problems, is essential to regional, national and general human progress.

2. Regions, sub-regions, districts, and other land areas with a considerable degree of geographic-economic-cultural cohesion and unity are logical units for comprehensive and effective planning and development.

3. When the most suitable regional or district centers and general tributary fields are discovered, continuous, over-all planning should be provided to guide the public effort with respect to public works, conservation and development of human and physical resources, and the solution of other common problems which are important from the standpoint of locality, State or Nation.

4. There is no universal solution for the problem of de-limiting planning areas or choosing the kind of legal machinery; individual analysis is required, and organizational arrangements and legislation must vary somewhat with the area, objectives, functions, and other conditions.

[1] *Regional Planning, Part III, New England,* National Resources Committee, July, 1936.

[2] *Regional Planning, Part VII, Alaska, Its Resources and Development,* National Resources Committee, Alaska Resources Committee, December, 1937.

5. Some further general studies of conditions and needs with respect to regional and district planning are desirable, for example:

a. It is suggested that consideration be given to a study, based upon or amplifying the recent urbanism survey, covering specifically the nature and problems of metropolitan districts, and, if practicable, developing a series of suggestive organization principles and plans, and suggestive model enabling acts for common or typical conditions.

b. It is also suggested that consideration be given to a re-opening of the 1935 study of regionalism, with the view of inclusion, in a supplemental study and report, of a review and appraisal of activities in this field during the past three years, and of existing and proposed organizational, administrative and legislative arrangements.

6. Generally, existing organizational and legislative arrangements, including appropriations, for district and regional planning are inadequate in relation to the potential benefits to be derived.

7. There is a present indicated general need of legislative authorizations of various kinds:

a. Municipal: Establishment of municipal planning commissions, with provision for their coöperative association with the planning bodies of other municipalities, and of county, metropolitan, district, State, region and Nation.

b. State:

(1) Blanket permission for establishment of regional planning bodies composed of groups of county and other municipal planning boards and the state planning agency;

(2) Special authority or appropriation for planning in vital regions;

(3) Provision for maximum practicable integration of various state administrative districts;

(4) Provision for county and municipal consolidations;

(5) Blanket provision for association and coöperation of state, district and municipal planning boards with planning boards of other States, region and Nation;

(6) Provision for association of state and municipal planning boards in interstate planning regions or districts;

(7) Provision for interstate compacts to cover planning and developmental measures in important interstate regions or districts.

c. National:

(1) Establishment of continuous national and regional planning, and a permanent national resources planning agency, with (among other duties) authority to establish and manage, and participate and coöperate in sub-national regional planning; promote and serve in interdepartmental coördination in national and regional planning; aid, participate, and coöperate in state, district and municipal planning as may be mutually agreed; serve as central clearing house of planning interests, concerns, and information.

(2) Provide for national and regional coördination, as may be desirable, in design, construction and operation of related public works, improvements and programs for conservation, development, rehabilitation and security.

(3) Provide for approval of arrangements for the negotiation and consummation of interstate compacts for regional planning and development purposes, and for federal participation in operations under such agreements.

Rural and Agricultural Zoning

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RURAL zoning is an outgrowth of the employment of zoning to regulate land use within incorporated municipalities. The movement at first was an extension of municipal zoning into suburban areas and to strip zoning along important highways. Later the zoning principle was extended to purely rural areas and rural conditions. A brief sketch of the development follows:

URBAN TYPE OF RURAL ZONING

San Francisco County in 1921 and Los Angeles County in 1925 and 1927 adopted "districting" plans.[1] A comprehensive planning act enabling all California counties to adopt zoning regulations was enacted in 1927 and 1929. Wisconsin passed an urban county enabling act in 1923. In 1925 the legislature of Georgia, clear across the continent, proposed a constitutional amendment—duly adopted the following year—to permit the authorization of zoning in urban Fulton County. The year 1927 saw further county enabling acts designed to apply to suburban conditions. In that year, enabling acts for Glynn, Chatham and Fulton counties were added to the statute books of Georgia; an act applying to counties with a population density of over 500 per square mile, in Virginia; and an act laying the basis for zoning in the Washington metropolitan area, in Maryland. In 1928, a statute authorizing zoning

*The committee acknowledges the helpful assistance of Herman Walker of the Bureau of Agricultural Economics in the assembly of material for this report.

[1]See L. Deming Tilton, "The Districting Plan of Orange County, California," in *Journal of Land and Public Utility Economics,* November, 1936; and H. R. Pomeroy, "County Zoning under the California Planning Act," in *Annals of the American Academy,* May, 1931.

adjacent to second-class cities was passed in Kentucky. Since then other urban county enabling acts include: Illinois (1935), Maryland (ten counties, 1935), Tennessee (Shelby County, 1935), Florida (Dade County 1937), and Georgia (Cobb, Richmond and DeKalb counties, 1937–38).

Parallel to this development has been the growth of zoning enabling legislation for "towns" in the northeastern States (combined urban-rural units of government) and for townships in a few of the middle States. The beginning was made in 1925, when three States (Rhode Island, Connecticut, and New Hampshire) passed acts enabling "towns" to zone. The development was rapid in this region; and by 1933 town enabling acts were in force in all the New England States and New York. In addition, a 1928 New Jersey statute had empowered townships to zone, and Pennsylvania in 1931 authorized zoning in first-class townships. A 1937 law has extended the power in Pennsylvania to second-class townships (thus completing the authorization for all townships in that State). In 1929, moreover, the Michigan legislature enacted a township enabling act. This authority was later withdrawn, in 1933, only to be restored again in 1937 to certain townships (those with a population of 5,000 or over and those adjacent to cities having a population of 40,000 or over).

RURAL TYPE OF ZONING

Wisconsin took the lead in passing legislation to apply zoning to strictly rural conditions in the form of an amendment to the 1923 act passed in 1929, under which counties are permitted to "regulate, restrict and determine the areas within which agriculture, forestry and recreation . . . may be conducted." Other States have followed suit. In 1933, Michigan, by way of a revision to the pre-existing township act; in 1935, Indiana and Washington, in their respective county planning acts; in 1937, Pennsylvania, Tennessee (the latter covering only the counties of Johnson, Sullivan, Unicoi, Washington and Carter), and California (amendment to the 1929 planning act); in 1937–38, Georgia authorized zoning along highways (Glynn, Liberty, Chatham and Bryan counties only); and, most recently—on April 1, 1938—Virginia.[1]

SUMMARY OF PROVISIONS OF THE LAWS

There is less uniformity in rural zoning acts than in the city acts. A fairly complete enabling act will include the following main features: (a) statement of purposes; (b) grant of power to local authorities; (c) provision for a commission to make the investigations and formulations prerequisite to rational zoning and to recommend the main lines of the ordinance to be adopted by the governing authority; (d) provisions for hearings; (e) board of appeals or adjustment; (f) enforcement; (g) amendments.

[1]These acts have typically been comprehensive in character, covering suburban as well as distinctly rural situations.

Grant of Power: The acts which are exclusively zoning in scope ordinarily set forth the grant of power in pointed and enumerative terms. The Wisconsin act may be cited as an example. More frequently, the acts do not limit the types of rural zones to agriculture, forestry and recreation, as does the Wisconsin act; but allow also the establishment of districts for "conservation," "grazing" and others. The Dade County (Florida) act gives authority to regulate the uses of both "land and water." What types of zones it is needed to permit, of course, depend entirely on the situations with which the particular localities have to deal; and probably in the States now having zoning laws, agricultural, forestry and recreation zones may usually fill the bill, at least for the time being.

A single statement is usually deemed to be sufficient to cover the needed power; and the Michigan law is unique in containing three separate grants, in as many sections, each one of which is phrased in different terms. The first speaks of the "areas within which given forms of land utilization shall be prohibited or encouraged," of the "use of land for trade, industry, residence, recreation, agriculture, forestry, water supply conservation," etc., etc., and of the "location of trades and industries and of buildings designed for specified uses"; the second, of the height, etc., of buildings, the size of yards, and the "areas to be used for agriculture, forestry and recreation"; and the third of the number of families permitted to occupy dwellings.

Washington, California and Indiana provide for zoning in the course of planning statutes. Here zoning is expressly conceived to be a device for implementing particular portions of a master plan. In the Indiana act, for example, the county board is authorized to adopt ordinances recommended to it by the planning commission "for the purpose of carrying out the master plan or any part thereof, including zoning and land use regulations." As stated elsewhere in the act, the master plan includes, among other matters, recommendations concerning "the general location and extent of existing and proposed forests, agricultural areas and other development areas for purposes of conservation, food and water supply, sanitary and drainage facilities, or the protection of urban and rural development; also a land utilization program, including the general classification and allocation of land within the county amongst mineral, agricultural, soil conservation, water conservation, forestry, recreational, industrial, urbanization, housing and other uses and purposes."

Purposes: The Pennsylvania act includes a particularly careful and comprehensive statement of purposes which may be quoted as an illustration: ". . . promoting the health, safety, morals, convenience, order, prosperity or welfare of the present and future inhabitants of the State of Pennsylvania, including, amongst other things, the lessening of congestion in the streets or roads or reducing the waste of excessive

amounts of roads, securing safety from fire and other dangers, providing adequate light and air, preventing on the one hand excessive concentration of population and on the other hand excessive and wasteful scattering of population or settlement, promoting such distribution of population and such classification of land uses and distribution of land development and utilization as will tend to facilitate and conserve adequate provisions for transportation, water flowage, water supply, drainage, sanitation, educational opportunities, recreation, soil, fertility, food supply, protection of the tax base, securing economy in governmental expenditures, fostering the State's agricultural and other industries, and the protection of both urban and non-urban development."

Zoning commission: Provision ordinarily is made for a commission to advise the governing authority as to the zoning ordinance to be adopted. Where county planning commissions have been set up (as in Washington, California and Indiana) they may serve this purpose. The membership of zoning commissions frequently is partly ex officio, including the chairman of the county board, the county engineer or surveyor, or other official. Zoning commissions usually are appointed by the local governing body In Tennessee, however, the governor designates a regional planning commission; and the Michigan township act vests the appointive function in the local judges

Coördination: Provisions to bring about coördination of county programs may include permissive authority for setting up coöperative relationships among counties. Some acts go further. Thus, Michigan requires approval of the county ordinance by the state planning commission, while in Pennsylvania the recommendations of the county zoning commission must be presented to the state planning board for comment before going to the county board for final action.

Boards of adjustment: The acts commonly, though not always, provide for boards of adjustment or appeal. Of the States now having county zoning enabling acts, Wisconsin and California do not provide for such boards. Urban zoning experience strongly suggests the advisability of such boards to assure compliance with constitutional requirements.

Non-conforming uses: Some of the older rural county acts are silent on the subject of non-conforming uses, contrary to the usual practice in city enabling acts. The Wisconsin act provides that the lawful use of buildings existing at the time of adoption of the ordinance may be continued, but "the alteration of, or addition to, any existing building or structure for the purpose of carrying on any prohibited trade or new industry within the district where such building or structure is located may be prohibited." The Pennsylvania statute, however, makes the interesting provision that the "board of county commissioners may in any zoning ordinance provide for the termination of non-conforming uses, either by specifying the period or periods in which non-conforming uses shall be required to cease, or by providing a formula or formulae whereby

the compulsory termination of a non-conforming use may be so fixed as to allow for the recovery or amortization of the investment in the non-conformance." This provision has been followed also in the legislation applying to the coastal counties of Georgia. The problem is taken care of in the Virginia act by a provision that the discontinuance of a non-conforming use entails the immediate loss of the right to non-conformance.

Enforcement: Typically, though not always, violation of the zoning ordinance is made punishable as a misdemeanor, and, further, the authorities are empowered to bring court action to enjoin or abate violating uses. The Wisconsin, Pennsylvania, and Georgia coastal county acts, moreover, also permit real estate owners within the zone (and the Tennessee act, adjacent landowners) to bring similar action. Where the law does not specifically lay down sanctions for enforcement, of course, zoning is likely to be nugatory.

Two States, Pennsylvania and Wisconsin (the latter by a 1935 amendment to its existent enabling act), provide for the drawing up of lists of non-conforming users—as a very material aid to enforcement processes. The Virginia act authorizes the appointment of an "administrative officer" to enforce enacted regulations; and under the Tennessee acts, a "building commissioner" may be designated, with authority over the issuance of building permits.

Referenda: A few of the acts provide for referenda of one kind or other. That of the Michigan county act is of the familiar local option type: that is, the vote is upon the question whether the enabling act itself shall become operative within the county—whether the county authorities shall be privileged to utilize the zoning powers therein specified. In the township act of the same State, the referendum comes at another stage in the procedure: upon the question whether a particular ordinance shall become effective. And there the question is determined by the vote of the people within the area proposed to be constituted a restricted district, rather than by the electors of the entire township. Similarly, the DeKalb-Richmond County (Georgia) urban-type act requires the consent of a majority of the landowners within the district affected. Finally, the Pennsylvania second-class township act stipulates that zoning powers may not be exercised if persons owning a majority of the total property valuation within the township file written protest.

A different type of provision, but somewhat similar in principle, is that of the Wisconsin act, limiting the application of any county ordinance to the towns (townships) whose governing boards shall have given approval.

SOIL CONSERVATION LAWS

During the past year and a half, 25 States have enacted statutes modeled upon the "Standard State Soil Conservation District Law." The soil conservation district is another promising social instrument

directed at democratic control of destructive soil erosion by wind or water. The powers of the district include the formulation and enforcement of conservational land-use regulations on a differential areal basis, and thus in some degree embody the rural zoning principle. The extent to which the full objective of rural zoning—direction of occupancy and major uses of land—can be achieved through the soil conservation district remains to be determined by experience. In areas where soil erosion is a minor problem, as in the forest areas of the northern lake States, for example, rural zoning appears to occupy a position which the soil conservation district can hardly fill. In other situations, a combination of the principles of rural zoning and of the soil conservation district appears highly desirable. In any case, a thorough analysis is needed of the place, possibilities and limitations of the soil conservation district in relation to the purposes and objectives of rural zoning.

RURAL ZONING IN WISCONSIN

Wisconsin has engaged in rural zoning much more extensively than any other State and a summary of progress in that State therefore is included. Milwaukee County adopted a county zoning ordinance in 1927, under the law then in force. Later the law was broadened to provide for county zoning generally. Oneida County adopted an ordinance in May, 1933. A total of 24 counties in northern Wisconsin have now adopted such ordinances. These are counties in which there is considerable undeveloped cut-over land, and zoning was adopted largely to eliminate the excessive costs of roads and schools resulting from additional isolated settlement.

The zoned counties are, in the order in which the ordinances were adopted, as follows:

County	*Date of Adoption*	*Districts*
Milwaukee	Oct. 25, 1927	"A" & "B" Residence; Local Business; Agric.; Commercial & Light manuf.; Heavy industrial; Unrestricted
Oneida	May 16, 1933	Forestry & Recreation; Unrestricted
Vilas	Nov. 16, 1933	Forestry & Recreation; Unrestricted
Langlade	Jan. 24, 1934	Forestry & Recreation; Unrestricted
Iron	Mar. 8, 1934	Forestry & Recreation; Unrestricted
Marinette	Mar. 21, 1934	Forestry & Recreation; Unrestricted
Eau Claire	May 12, 1934	Forestry & Recreation; Unrestricted
Sawyer	June 18, 1934	Forestry & Recreation; Unrestricted
Douglas	June 21, 1934	Forestry & Recreation; Unrestricted
Oconto	Sept. 13, 1934	Forestry & Recreation; Unrestricted
Ashland	Nov. 14, 1934	Forestry & Recreation; Unrestricted
Bayfield	Nov. 14, 1934	Forestry & Recreation; Unrestricted
Clark	Nov. 14, 1934	Forestry & Recreation; Unrestricted
Forest	Nov. 14, 1934	Forestry & Recreation; Unrestricted
Lincoln	Dec. 5, 1934	Forestry & Recreation; Unrestricted
Washburn	Dec. 20, 1934	Forestry & Recreation; Unrestricted
Wood	Dec. 22, 1934	Forestry & Recreation; Unrestricted

County	*Date of Adoption*	*Districts*
Price	Jan. 24, 1935	Forestry & Recreation; Unrestricted
Rusk	May 4, 1935	Forestry & Recreation; Unrestricted
Florence	June 28, 1935	Forestry & Recreation; Unrestricted
Monroe	Nov. 12, 1935	Forestry & Recreation; Unrestricted
Chippewa	Jan. 18, 1936	Forestry & Recreation; Unrestricted
Jackson	Jan. 29, 1936	Forestry & Recreation; Unrestricted
Burnett	Feb. 6, 1936	Forestry & Recreation; Unrestricted
Taylor	Sept. 16, 1937	Forestry & Recreation; Unrestricted

It will be noted that two types of ordinances exist in these northern counties, some having a combined "Forestry and Recreational" district and an "Unrestricted" district, and others having separate districts for "Forestry," "Recreation" and an "Unrestricted" district.

In the first case, the "Forestry and Recreational" district permits the following uses:

1. Production of forest products.
2. Forest industries.
3. Public and private parks, playgrounds, camp grounds, golf grounds.
4. Recreational camps and resorts.
5. Private summer cottages and service buildings.
6. Hunting and fishing cabins.
7. Trapper's cabins.
8. Boat liveries.
9. Mines, quarries and gravel pits.
10. Hydro-electric dams, power plants, flowage areas, transmission lines and substations.
11. Telephone and telegraph line rights-of-way.
12. Harvesting of any wild crop such as marsh hay, ferns, moss, berries or tree fruits and seeds.

(This district excludes the use of land for "family dwellings.")

The unrestricted district in this type of ordinance permits any use not in conflict with the law.

The second type of ordinance provides for separate districts for forestry and recreation. The "Forestry" district in this type of ordinance is substantially the same as the forestry and recreational district in the first type mentioned, but the second district, that is, the "Recreational" district, permits the use of land for any purposes allowed in the forestry district and further permits "family dwellings," that is year-round residence.

It will be noted that the county zoning now in force includes extremes from the highly urbanized to the strictly rural. Milwaukee County is densely occupied and decidedly urban in character. The 24 northern counties are substantially all cut-over land and might be considered as being at the bottom of the scale of the rural type of county. Between these extremes in Wisconsin there are some 40 counties whose development is generally of a high type of agriculture and in some cases is highly urbanized. There is at present considerable zoning activity in

southeastern Wisconsin in this middle type of county. This illustrates that rural zoning may be useful rather generally.

Studies made by the Wisconsin State Planning Board in the unzoned agricultural counties, particularly those with a degree of urbanization, show that the most pressing problems are as follows:

1. To plan and regulate the areas immediately adjacent to cities.
2. To make adequate provision for future streets and highways through a comprehensive system of setback lines. This includes the control of abutting land uses.
3. To eliminate unsightly and dangerous roadside development and to reduce as far as practicable the exits and entrances to the highways.
4. The segregation of the commercial and industrial uses and their future location in areas selected and planned for that purpose.
5. To establish standard of safety, sanitation and the location of tourist camps.
6. To set up and enforce minimum standards of land subdivision.
7. To protect the investment in residential and summer home developments in the rural areas.
8. To provide for, protect and develop adequate recreational areas.
9. To conserve and protect the water resources.
10. To control soil erosion.
11. To reforest denuded areas not suitable for agriculture, including the protection of headwaters of streams and of inland lakes.

Zoning ordinances have been approved by the county boards of Jefferson and Walworth for submission to the town boards for their approval. Tentative zoning ordinances have been submitted to the county park commissions of Kenosha, Rock, and Dane counties and there has been some preliminary discussion in Racine. Recently preliminary steps have been taken to begin work in Waukesha County.

The ordinance approved by the Walworth County Board illustrates how an ordinance may be drafted to fit a particular situation. Here is a large summer resort development, in fact the summer population is greater than the permanent rural population of the county. The ordinance, therefore, contains two residence districts completely surrounding those inland lakes which are at present most highly developed or in line for development. The district around Lake Geneva restricts the land to strictly single-family use at a density of 2 families per acre. Around the remaining lakes, the use again is strictly single family at a density of 5 families per acre. In addition to this, the regulations propose the establishment of some 21 rural business districts and the remainder of the county is in an agricultural district. The proposal is that all future business will be located in the commercial districts. This will mean the gradual elimination of promiscuous business locations up and down the highways.

The land subdivision regulations in the Agricultural and Commercial districts are the same as the "B" residence district, that is, five families per acre.

In addition to the land-use regulations, there is set up a comprehensive system of highway setback lines in two classes. Class A, which embraces the principal highways, has a setback line established 100 feet from the center line of the highway and all others are established at 75 feet from the center line.

Outdoor advertising structures are prohibited in all districts except the commercial districts. Due to the temporary character of these structures, they are not subject to the setback line regulations.

The Jefferson County ordinance is somewhat different from that of Walworth County in that no local business districts are established. The agricultural district is substantially the same as Walworth County. Along the Rock River and its branches and around the summer resort lakes, there have been set up "Conservancy" districts which are strictly single-family residences such as the "B" residence district in Walworth County. Here again a comprehensive system of setback lines is established which is coördinated with that of Walworth County. The Jefferson County ordinance also contains a "Forestry" district which is designed to encourage the reforestation of such land as is contained in the so-called "Kettle Moraine" in the southwestern part of the county. This is an area of steep, gravelly hills of practically no agricultural value but of a high recreational and forestry value.

Public hearings in the towns have just been begun in Jefferson County and to date, that is May 6, seven towns have approved the ordinance and two have not yet definitely acted. The remaining towns are still to be heard from.

The earliest ordinance in the group of northern counties was adopted in May, 1933, and during the course of five years the other 23 followed in fairly rapid progression. The effect has been exactly what was intended when their adoption was originally promoted, that is, high-cost schools are being closed, removal of isolated settlers facilitated and submarginal land is being closed to agricultural use and legal residence. This has been effective to the extent that substantially five million acres of such land have been so retired.

Progress in zoning of the southern counties has not been as rapid as it was in the North, for the simple reason that the existing problem is less acute as well as more complex. There are more individuals to deal with and zoning, as such, is confronted with many more factors than existed in the planning of cut-over lands. Experience in the southern counties indicates that the most successful procedure appears to be along the lines of a rather simple instrument drafted for the purpose of accomplishing certain obvious objectives. It is proposed to put such ordinances in effect, to encourage and aid in their careful and accurate administration, to keep the best possible record of the results obtained and, by so doing, to educate the citizenry, through demonstration, so that they themselves will demand the full measure of comprehensive planning. That such a

program as this is desirable is borne out by the experience in the town hearings in Jefferson County. The Wisconsin State Planning Board finds that people are in a receptive mood when regulations are proposed to control undesirable conditions which they themselves readily recognize. There are some who are quite skeptical of any activity whose newness is as great as is this one and while these are perfectly willing to support the principle, they are decidedly hesitant to accept the fact. However, this hesitancy is not, by any means, of a degree which might be called resistant. We find the people in a receptive mood but cautious in their action. It may be that the Wisconsin statute which places the acceptance or rejection of planning proposals directly in the hands of the people is having some effect.

PROBLEMS IN A ZONING PROGRAM

Rural zoning has met with much favor in Wisconsin. While, as indicated earlier, a start has been made on zoning programs in several other States, the progress has not been very rapid. A brief review of some factors which may account for this may be in order.

The extension of rural zoning is dependent upon the more general enactment of suitable enabling acts to provide authority for such a program. One reason why relatively few States have taken this step is that of a lack of understanding of the problem. Present-day legislatures are confronted with a host of matters clamoring for attention with limited time available for their consideration. Under such circumstances, the prospects of enactment of any given proposal tend to be in direct relationship to pressure brought to bear for its favorable consideration. Until the place of rural zoning is understood to the point where the demand for needed enabling acts is recognized more generally, progress may be expected to be rather slow.

A program such as zoning which appears as an interference with private affairs tends to be looked upon with suspicion unless its purpose and methods are understood. Zoning is designed to direct land into the most suitable uses, not to set up unnecessary or unwarranted restrictions. The progress in Wisconsin undoubtedly has been made possible in large measure by the educational work carried on by the College of Agriculture and other agencies which has developed a wide-spread understanding of the purposes and possibilities of zoning. Extension of the idea into other areas depends in no small degree upon the amount and quality of educational effort which is devoted to the subject. Such education in order to be effective must be carried on by persons who are conversant with the problems and know how to present the subject to rural people. Zoning will not progress merely as an abstruse desideratum for national welfare. Its material benefits to the people of a particular county or locality must be made clear. At the same time, education must avoid overselling the idea.

Along with the necessity of education is the desirability of providing technical assistance to local people in developing plans for zoning and in drawing up an ordinance for their consideration.

Possibilities of effecting specific savings in public outlays for roads, schools and other services when understood supply an incentive for the adoption of zoning. In Wisconsin, the fact that the counties take title to the tax-reverted land and that the forest-crop law encourages the development of county forests probably is of no little significance in the zoning movement in that State.

The longer-run success of rural zoning will depend in no small measure on enforcement. Unless the restrictions provided by ordinances are enforced, zoning will lose much of its effectiveness. Here again education and understanding are of paramount importance.

SUPPLEMENTARY AND COMPLEMENTARY MEASURES

Zoning in and of itself does not constitute a complete land-use program. It needs to be supported by other programs and policies. For instance, state aids for local services such as schools and roads should be applied in such a way as to foster and support good land use. Zoning after all is designed to prevent future mistakes in land use. As it is not retroactive, it cannot by itself correct mistakes of the past. Suitable purchase programs to retire unsuited land from agricultural use have a place. The same applies to aid in the relocation of settlers now on non-agricultural land or in isolated locations. Exchange of land may be employed to this end in some cases. The coöperative grazing association appears to offer real advantage in some situations, especially if supplemented by rural zoning. Laws relating to tax delinquency often need revision in order to supply clear title to such land. Policies of disposition of reverting land should be designed to retain in public ownership land which is not suited for successful private development. Competent classification of reverted land is basic to a satisfactory program of its disposal. Adjustments in taxation may have a place in improved land use. Credit policies which are more discriminating with respect to the suitability of the land for different uses also may be made helpful. Administration of relief also should bear in mind the requirements of good land use. If returns are to be obtained from the land which under zoning is restricted to forestry, recreation, grazing or similar uses, adequate plans for the utilization of land for such purposes both publicly and privately are essential.

It is now nearly a decade since Wisconsin adopted the first distinctly rural zoning enabling act. Including Wisconsin, nine States have now adopted similar measures. In a number of other States, rural zoning is being given active consideration.

Rural zoning has demonstrated its effectiveness as a thoroughly democratic tool of great value. It is a promising social instrument.

Urban Land Policies

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LAND RESERVES FOR AMERICAN CITIES

HAROLD S. BUTTENHEIM and PHILIP H. CORNICK

EDITOR'S NOTE.—The following is an authorized summary of this report, as it appeared in the *American City* magazine for July, 1938. Much of this paper is based on the as-yet unpublished report to the National Resources Committee of its sub-committee on "Land Policies for Rational Urban Development," and on the report on "Premature Subdivision and Its Consequences," recently published by the New York State Planning Council. A more comprehensive presentation of this subject of Municipal Land Reserves appeared in the August issue of the *Journal of Land and Public Utility Economics.*

WHILE American cities have as yet done little to add to their land-holdings for other than immediate public needs, the experience of numerous European cities has demonstrated the wisdom of public land reserves. The acquisition of public land for housing purposes is reported from cities in Austria, Czechoslovakia, Finland, France, Germany, Great Britain, Holland, Italy, Norway, Poland, Spain, Sweden and Switzerland. Russia is, of course, the outstanding example of public land ownership, but more years must elapse before the Russian experiment can be properly evaluated.

Many municipalities in Scandinavian and Germanic countries have long held considerable amounts of land, some of it handed down from medieval times. In some countries this has been augmented by large grants from forests and estates of the national domain. In Finland, for instance, the State, up until the nineteenth century, gave land for founding towns, usually on condition that the full property rights should not be given to private individuals. Although this provision was modified late in the nineteenth century, towns still own practically all the land within their boundaries. By 1926, the total area of building sites sold by

all Finnish municipalities amounted to only 3.5 per cent of the combined areas of all the towns. Helsingfors, with an area of 6,300 acres, owns 13,000 acres of land, much of it outside city limits.

From the end of the nineteenth century, municipalities in Finland, Norway, Sweden, Denmark, the Netherlands, Germany and Austria have pursued a systematic policy of steadily increasing their land-holdings both within and outside the city limits. Since 1904, the land acquisitions of Stockholm, mainly for housing purposes, have amounted to over 20,000 acres, or five times the area of the original city. The five next largest Swedish cities own from 47 per cent to 80 per cent of their administrative areas. Copenhagen owns over one-third of the total area within its limits available for building. Oslo owns a suburb that is twice the area of the city. The Hague possesses 4,408 acres, or 45 per cent of the city area. Zurich owns 5,621 acres, half of which is within the city.

Vienna owns more than 15,000 acres, exclusive of streets, or more than one-fourth of its area. Exclusive of streets and railways, Berlin has a municipal domain of over 75,000 acres within its limits, embracing more than a third of its area, and owns another 75,000 acres of forest and agricultural land outside the city proper. Most German cities own considerable tracts outside their limits, frequently larger than their holdings in the city proper. In addition to land for public buildings, parks and other uses common in American cities, German municipalities own extensive forests and agricultural estates managed either by the city or leased to private operators. In many cities, particularly since the war, much housing has been built on land leased or sold from the public domain.

All German cities over 50,000 in population own, on an average, 23.6 per cent of their municipal territory, excluding streets, railways and land used for sewage disposal and similar services. The average distribution by specified uses of this 23.6 per cent of urban land in 1933-34 was:

Use	Per Cent
Forests	39.9
Agriculture	39.9
Vacant property	5.6
Parks and gardens	4.8
Buildings	4.6
Miscellaneous	5.2
	100.0

In European cities public land ownership has resulted in considerably lower land costs for a variety of projects. In the case of Wythenshawe, the city of Manchester, England, acquired 3,710 out of the 5,567 acres at agricultural value before any building was started. The estimated saving of some $5,000,000 will result in considerably lower rents or smaller public subsidy. In Stockholm the city was able to counteract threatened inflation of land prices. In Copenhagen, land speculation was effectively

controlled during and after the war by the municipality's selling its own land at low prices and also by extending other government aid to housing conditional on low land prices.

GREENBELTS AND GREEN WEDGES

The folly of allowing further unrestricted expansion and disorderly sprawling of cities into rural areas, turning green fields and forests into dreary city streets and making the countryside inaccessible to the poorer inhabitants of the interior districts, is gaining increasing recognition both in America and in Europe. The greenbelt idea rests on the proposition that solidly built-up cities can be too large, that definite limits of expansion must be assigned, and that further growth in the region must take place in outer satellite communities separated from the central city and from each other by wide green spaces. This method of city growth is to be effected by the acquisition of a wide band of unbuilt land surrounding the city from which close building development is permanently banned.

A greenbelt not only limits the size of a community to a desirable maximum, but protects it from inharmonious encroachments. The greenbelt also provides much-needed breathing space to congested urban areas—a place where the smoke, dirt and grime of the city are dissipated and the oxygen content of the air renewed. In the greenbelt might be located playing fields, golf courses, lakes for boating and swimming, allotment gardens, larger farms, meadows and forests. The beauties and advantages of the countryside would be preserved on the very doorstep of the city.

Either in combination with greenbelts or alone, consideration should be given to the establishment of green wedges that would be gradually driven in farther and farther toward the heart of the city by acquiring land at their points. Such wedges would not only provide breathing space and recreational areas, but would serve as corridors leading out to the open country and as barriers between different parts of the city. The municipal forests that reach right into the heart of such German cities as Hanover, and many of the parkway developments in this country, such as the Westchester County Parkways in New York or Rock Creek Park in Washington, are good examples of green wedges.

Greenbelts are an integral part of the English garden cities, Letchworth and Welwyn, and of the new "greenbelt towns" of the Resettlement Administration in this country. Partial greenbelts or agricultural belts are found in many other planned developments in Europe.

MEANS FOR ACQUIRING LAND RESERVES

On the basis of the experience of European cities with extensive landholdings available for general purposes, and of a small handful of American cities with lands suitable only for specialized purposes such as docks,

a strong case can be made for the acquisition by the municipalities in this country of land reserves suitable for other than street and park purposes. One large question is: How can such lands be acquired?

The Federal and state governments have no holdings of urban lands which could be granted to the cities. That fact at once removes the possibility of building up future municipal land reserves in this country from the chief sources of such reserves in the past.

Proposals have been recently made that the Federal Government should give grants-in-aid to municipalities to purchase land for housing purposes. Parallel proposals for relaxing the constitutional restrictions on the powers of state governments, with a view to permitting them to make loans and grants to municipalities for the purpose of acquiring and developing lands for low-cost housing are under consideration in several States. Some students of the financial history of state governments show a tendency to doubt both the wisdom and the effectiveness of these proposals. They point out that the existing limitations on the powers of state governments to incur debts, and on the purposes for which moneys may be appropriated, grew out of the extravagant exercise by the States of their previously unlimited powers to borrow and expend money for purposes which in their day were considered not only "public" in character, but essential to the development of the local governments.

It is in recognition of these facts that a third proposal has developed its ardent advocates. Under this plan, the limitations now imposed on the rights of municipalities to borrow, and on the purposes to which they may apply the proceeds of their bond sales, are to be modified, in order to permit them to acquire and develop lands for municipal housing projects. The fact that, when all local expenditures are taken into account, very few cities have been able to expand their revenues sufficiently to obviate the necessity for borrowing in order to meet recurrent annual expenditures of a non-capital nature, casts doubts on the adequacy of this plan of financing the acquisition of municipal land reserves.

Municipalities are not, however, wholly and forever debarred from acquiring lands suitable for general purposes, and from holding them as a reserve until the need for their use arises. In fact, without intending it, a large number of municipalities have already bought extensive holdings of lands within and near their borders, and have paid for them in full out of current revenues during a number of years past. All that remains is for them to take title. Since the holdings were acquired unintentionally and therefore planlessly, they are heterogeneous in character, and dispersed in location. Even after cities take title, some time must elapse before they can ascertain the uses to which the lands are adapted, and before they can take the necessary steps to consolidate their holdings by exchanges with the private holders whose lands now lie interspersed with the lands which already constitute a public land reserve in fact if not in name.

A NEW YORK STATE STUDY OF PREMATURE SUBDIVISIONS AND TAX DELINQUENCY

A report by Philip H. Cornick issued in 1938 by the New York State Planning Council, which presented information on the central cities and on certain of their suburbs in the four largest metropolitan districts of the State, corroborated the findings of the pioneers in the field.

The areas subjected to scrutiny included 8 cities, 50 villages, and 62 towns, ranging in population from New York City with almost 7,000,000 inhabitants to the remote town of Poundridge with only 602. Except for a few compactly built villages, excessive subdivision was evident in all, but had been carried to greatest extremes in the suburban towns adjacent or in close proximity, to the central cities of the four regions.

Another section of the study dealt with the arrears of taxes and special assessments in 5 cities and 47 towns. More than half of the 292,901 vacant lots were found to be in arrears—162,972, to be exact. The total unpaid taxes and special assessments, exclusive of penalties, in the 52 cities and towns, amounted to $34,567,307, of which the vacant lots were responsible for slightly more than two-thirds.

With respect to duration of arrears, a sample of 100,506 parcels of vacant land, lying in 3 cities and 25 towns, was distributed by year of first delinquency. It developed that 62,501 of these vacant lots had already appeared on the tax lien registers in 1931; 18,863, as long ago as 1926. The problem revealed by the analysis of arrears is not a new one, but had been growing up unobserved for decades. This fact is further demonstrated by isolated, old subdivisions lying in outlying towns in which every lot has remained vacant since the year of the subdivision, and in which every lot has been in arrears for between 30 and 40 years.

In the great majority of the areas studied in New York, the law provides that the liens for unpaid taxes shall be offered for sale at public auction. That practice had been followed in all the sections included in the study, but very few liens on vacant lots and lands proved salable. They remained in possession of the city, town, or county, depending on the provisions of the general or special laws in force in the area. The liens remained unsalable partly because the lands themselves had little value for urban uses; partly also because of the time and money required for the foreclosure of the liens. The same obstacle long stood in the way of foreclosure by the governmental agencies which held the unsalable liens.

None of these local governments has yet realized the advantages of holding these lands in reserve. Each is trying to sell them, allowing the purchasers to pick and choose more or less at random among the public holdings. Evidence is accumulating, however, that the excessive number of lots involved will be no more readily salable as lots by the local governments involved than they proved to be in the hands of the former owners; and that replanning and replatting must precede any successful

program for putting the lands to use, whether in public or in private hands. When those facts shall have been demonstrated by experience, it is to be hoped that the planners may succeed in guiding the local governments to a realization of the wisdom of withholding selected areas not only from sale, but also from dedication to permanent park and recreational uses.

Much remains to be done before the local governments can acquire valid title to all the vacant lands for which they have been paying the price throughout many years. With all the progress that has been made, foreclosure costs remain disproportionately high when the values of the more poorly located lands involved are taken into account. A carefully drafted bill designed to reduce these costs to a minimum was introduced in the Legislature of New York at the last session, but failed of passage. The caliber of the committee which drafted it is such as to commend the bill to municipalities in other States which are confronted by analogous problems.

Whenever foreclosure costs can be reduced, municipalities in State after State will be in position to take title to extensive land-holdings—holdings which in fact they have already bought and paid for.

THE BEARING OF ZONING AND PLANNING PROCEDURES

Zoning boards and planning commissions had been established in most of the urban and suburban municipalities of New York for which the study was made. They had certainly done little to guide or check the madness which led to the waste of public and private funds in the premature subdivision of rural lands for urban purposes. There is even some ground for the belief that the wide-spread tendency to overzone helped to accentuate the madness.

When all the outlying lands within our city limits and for miles and miles beyond their boundaries are zoned for uses to which they cannot possibly be adapted, we are courting disaster. Worse still, we are depriving the existing uses of the protection to which they are entitled, and without which many of them must disappear; and we are providing bait for suckers to be used by shoestring promoters of so-called home developments on which no real home can ever exist.

In order to stabilize values in such areas, and to protect existing uses against incompatible and destructive intrusions, we shall have to learn that zoning of the conventional urban type is wholly inadequate in many suburban and rural areas, whether those areas exist inside or outside the city limits. In order that such areas may have the benefits of zoning, we shall have to learn how to bridge the existing gap between the most intensive use for which provision is made in the rural zoning ordinances of Wisconsin, and the least intensive use characteristic of developed urban centers. The problem is how to provide for the many, varied, and indispensable uses which lie between the two extremes.

THE PLACE OF TAXATION IN THE PROBLEM

Only philanthropists—and few of them—will undertake operations for low-rent housing when they know in advance that increased taxes on the property must be deducted from the rigid gross rents before any allocations can be made to operation and maintenance, or to the fixed charges on invested capital. In short, we subsidize those who maintain slum dwellings and penalize those who would replace them. As long as we persist in maintaining this absurdity in our existing tax system, we shall make little progress in clearing our slums beyond the extent to which the Federal or state government take over the task or provide subsidies sufficient to offset the effects of the penalties imposed on the private builders who might otherwise attack the problem as a business venture.

It is possible to devise a system of local property taxes which would decrease costs of construction, and of operation and maintenance, and thereby increase industrial activity, employment and the effective level of wages. By progressively lowering the rate of taxation on buildings and increasing the tax rate on land, such a system would decrease the tax burden on home owners and on tenants of low-rent housing projects and would advance the public welfare through properly penalizing those who would hold desirable land out of use in order to speculate on the chances for sale at a profit when more intensive uses become possible. It would thus become an effective weapon against the forces which today make it almost impossible to obtain public acceptance of a zoning ordinance which does not set aside for business, for multi-family residential uses, and for single-family uses, larger areas than can ever be used for those purposes; and which enable holders to maintain the prices of unused or partially used lands in each zone at levels so far above capitalized earning power that the adequate development of the lands becomes economically impossible.

ZONING*

S. R. DEBOER

Nearly twenty-five years have passed since the first American cities began to regulate their building processes by zoning. It was a great step forward in the matter of more orderly city building. There was a great deal of argument in regard to the legality of zoning, and in most cases the ordinances actually passed were a compromise between the interests of real estate holders and the city. The efficacy of the work, however, is apparent today, and perhaps is nowhere more evident than in the areas outside of the limits of zoned cities. A comparison between these outer and unzoned districts and the regulated growth inside the city limits is the most convincing argument for zoning.

*Mr. DeBoer does not disagree with the report of Messrs. Buttenheim and Cornick but since his approach to the subject has been from the standpoint of correction of present-day zoning regulations, he is submitting a minority report.

In the light of nearly two decades of experience, it is well to review the effect of zoning on the various units of the city plan. The principles underlying the zoning work were a desire for more sunlight and air; greater protection against smoke, noise, dust, and other city annoyances; better regulation of traffic and of utility lines; prevention of crowding; and in general, a more orderly growth. It is reasonable to expect that after two decades of zoning, new thoughts would occur which would require a broadening of the regulations and also that the matters which had to be compromised in the early ordinances would by now show their effect. We shall take the zoning rules by their usual districts and briefly review some shortcomings.

Business Districts: The original proposals for zoning were based on building height studies in New York and Chicago. In these studies the influence of one tall building on the surrounding property was clearly indicated. Shadows were measured and calculations made in regard to the amount of sunlight which would reach offices. In spite of the fact that the studies indicated that more light and air were badly needed, the influence of the zoning ordinance in this respect has been largely on the upper stories where the set-backs amounted to enough to create open space. In the lower stories the effect of zoning in regard to more light and air has been very small.

This result might have been expected because the business districts of our cities were largely established when zoning ordinances were passed. Land values were such that it became an injustice not to allow the builder of a new office building to make the use of the land area in a similar way as the existing buildings. From the standpoint of the lower six to ten stories of office buildings, the zoning ordinances might have been non-existent.

It is now generally felt that cities have set aside far too much area for business purposes. This was bound to happen because the process of zoning in a democracy requires the approval of the property affected, or at least a sufficient majority of it. Since in most places the highest value of real estate is represented by the commercial area, it was logical that many property owners insisted on that higher financial use rather than on other uses. The interest of the city as a whole had to be more or less submerged to meet the interest of individuals. As a result of the over-zoning of commercial areas we now have a condition where the amount of business property is so great that it affects the values of all business property. Downtown districts, especially, are affected by the great amount of business frontage which has been set aside along major traffic arteries.

Zoning has had no material influence on the appearance of our business districts. It did not intend to promote esthetic values, and none has occurred with the exception perhaps of the skylines created by the set-back type of buildings.

Apartment House Districts: As we examine the zoning ordinances in regard to apartment houses, we find that the intention of creating more sunlight and air has been theoretical rather than actual. Side yards in apartment house districts run from three feet to one-eighth the height of a building. The open space between two buildings is hardly ever more than ten feet. Front yards often are not required, and then often are not more than eight or ten feet. Lot coverage is frequently as high as 80 per cent.

Housing experts lay down the following requirements for modern apartments: They must have cross-ventilation, sunlight, quiet, a pleasant outlook, adequate privacy, children's play space adjacent, and all of this must be available at a price which citizens of average income or below can afford. If we check these ideals against present-day zoning, we find that very few apartment houses have cross-ventilation. Sunlight is excluded from most apartments. Street noises reach up to the lower floors, smoke and soot also invade the lower stories. A pleasant outlook is rare, as well as expensive, and playground facilities are usually less available in the densely populated apartment house districts than they are in the fancy open residential districts.

Density of population in the apartment house zone has been somewhat regulated, but the maximum densities allowed by zoning ordinances are far beyond what is considered good housing.

Zoning has definitely emphasized horizontal building. The average apartment house is only 2⅓ stories high and occupies most of the site. This means that a great percentage of apartment house dwellers live in the lower strata of city atmosphere, where smoke and soot and dust as well as noise and commotion are the worst and play space impossible.

With present-day facilities there is no reason why apartment houses should not be built higher and given cheap elevator service. More ground space which can be used for playground work and beautification would result, as well as better air and light, and chances for cross-ventilation for all rooms.

Single Family Districts: The effect of zoning has been felt perhaps more in the single family district than elsewhere, and our cities may well be proud of the large number of single family homes they have. Cheap transportation and cheap real estate have been a factor in this as well as zoning, but the fact remains that without protection most of our attractive residential districts would have been despoiled during the last two decades.

In some cities the restrictions for these districts have been rather too complicated and not enough emphasis given to open ground space, elimination of non-conforming uses, and proper relation to traffic arteries. The future will demand that these areas be kept as free as possible from the annoyance of traffic. New types of subdivision designs are already based on this demand, and zoning regulations should be made to meet it.

Industrial Districts: The industrial district is very largely an unrestricted one in our zoning ordinances. As the result of that it has become the place where very cheap buildings of a temporary nature are being erected by many of the transient residents of the city. So far cities have found no solution for this problem and the influence of the zoning ordinance in regard to these has been non-existent. If a special residential district could be created for temporary shacks, it would be well to prohibit the use of the industrial area for residential purposes.

Housing Projects: The inadequacy of present zoning ordinances is perhaps most conspicuous in the matter of slums and proposed housing projects. The influence on slums as such has been negligible if at all existent. Perhaps none could be expected because the zoning ordinances were not retroactive and at no place provided for slum clearance. It is now clear that zoning cannot be applied in this respect and that only wholesale acquisition of slum blocks and their replacement by better structures will be effective. The same thing holds in regard to new housing projects. Zoning has not promoted a healthy piecemeal rebuilding of obsolete areas, but mostly the control of building in new subdivisions and vacant land. For good housing projects we must today not only acquire the land but demolish large blocks of obsolete buildings. In regard to housing and slum clearance the conclusion must be that zoning regulations by themselves are not able to cope with conditions but that they must be supplemented by acquisition of obsolete blocks.

CONCLUSION

1. Zoning has had a great deal of influence on the orderly building of cities, but the expectations of greater sunlight, more air, better control of traffic, etc., have been only partly realized.

2. In business districts zoning has not materially aided office buildings to acquire more sunlight and air. The age of skyscrapers seems to pass. It is very likely that a new trend may occur and that it may become possible to surround office buildings by a considerable amount of air space beginning at the ground floor. Studies of business districts should be made in regard to modern trends in building.

3. Elimination of some of the superfluous business area along traffic arteries and in the outlying districts is essential.

4. A restudy of the basic principles of zoning in regard to apartment houses is necessary, and perhaps the future may see higher buildings surrounded by more ground space rather than the many two- and three-story apartment houses which our cities have today.

5. In industrial districts the problem of allowing residential use should be analyzed.

6. Zoning studies should be accompanied by studies showing proposals for acquisition and demolishing of obsolete blocks.

The Administration of a Planning Office

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THE ancient recipe for crow soup suggests a good starting point for a discussion of the administration of a planning office; in other words, first get your office. With this as a sort of springboard, we may plunge at once into the depths of our subject, fully conscious that upon and below the surface may be found the rocks and reefs, eddies and whirlpools, wherein currents and cross-currents of opinions may be created, and upon which conclusions may be rent asunder. We welcome this opportunity to test the validity of our own convictions, however, in the hope that eventually we may all emerge into clear untroubled waters, with smooth sailing, a cloudless sky and uninterrupted progress.

Our task has been materially lessened by the work of the program committee itself in suggesting various subheadings which might be considered in a discussion of the subject as a whole. These subheadings have been followed; overlapping has been stopped short of duplication, at least; and, where necessary, specific subjects have been stretched to cover any apparent hiatus in the completed structure. With this charge to the jury, and a plea for clemency, we submit our conclusions.

The planning commission, while not an administrative nor a legislative body, is an advisory agency to both the legislative and administrative arms of government. Its administrative organization and technique, therefore, must be geared to those of other branches of government, whatever their level. Because of our very limited experience with state, regional and national planning agencies, it has been deemed expedient to confine this report largely to the administration of a local planning office. We believe, however, that the same principles are valid in the case of planning agencies on higher levels of government, although the

mechanics are likely to be quite different. It is also true, although the principle remains the same, that interpretations vary, particularly with regard to methods of procedure, in different parts of the country. County planning, for instance, is firmly established in certain sections, among other things combining the functions of initiation with those of coördination. All that is possible in the present instance, therefore, is to point out some of the more obvious basic features involved, rather than attempt to lay down any hard and fast rules with regard to detailed administrative procedure.

Generally speaking, the administrative techniques of a planning commission mean matters of administrative organization, procedures and processes which the commission applies in the conduct of its work. In approaching these topics, however, attention might properly be called to certain other factors, such as legislation, the composition, membership, qualifications and size of the commission itself, and its financial resources. These considerations are a sort of endless chain which constitutes more or less a condition precedent to matters of actual administration. As such it may not be amiss to touch upon them briefly before consigning them to their proper place in the background of this report.

A proper legal background, in the form of legislative act and local ordinances, is one of the first essentials. While many of the earlier enactments suggested broad fields of investigation, the powers of planning commissions were frequently limited to recommendations only. Recent legislation, however, has shown a tendency to confer upon the planning agency certain definite authority, in connection with subdivision control, zoning changes, and other developments affecting the physical plan of the community. This enables the planning commission to be of real service, and if such legislation does not exist, it might properly be sought to the end that all matters involving the location and the extent of public facilities and zoning changes should be automatically referred to the planning commission for recommendation or approval.

So far as the commission itself is concerned, perhaps it may be assumed that the personnel is adequate from the standpoints of qualifications and experience. There is needed first and most of all a broad understanding of the community and its problems and of the contribution that planning is able to make in the solution thereof. An enthusiastic, sincere and unselfish interest in the welfare of the community is fundamental. Professional training on the part of some of the members at least is equally important. The success of the commission in obtaining appropriations and public interest depends in large measure upon the members themselves, the extent to which they enjoy the confidence of their fellow citizens and their recognized ability to pass upon matters of a technical and oftentimes complicated nature.

Appropriations in the past have been generally inadequate and while causes and cures may vary in different sections of the country, there is

little doubt that a commission which enjoys the confidence and esteem of the public will have considerably less difficulty in translating that feeling into a budgetary allotment than would otherwise be the case. Bridges may be seen and admired; streets, in the process of construction at least, are impressive; and libraries and parks and playgrounds have their appeal during the hours of leisure; but to look beyond all these to a sort of intangible something, even though it be capable of exercising a wide influence both from the standpoint of efficiency and of economy upon the location of these visible marks of community progress, is asking too much of the vision and of the imagination of the ordinary citizen. If this is regarded as a criticism, then it must be shared by the planning agencies themselves, for in many instances they have lacked the inner conviction and ability on their own part that would enable them to convince others. When all is said and done, it is farcical for any legislative body to set up a planning agency, under an act or an ordinance requiring them to do certain things, and at the same time withhold from them the wherewithal necessary to carry out their duties.

The size of the commission may be relatively unimportant. Whether all citizen members, or part citizen and part ex officio, members, are desirable, there is no general consensus. There appears to be agreement upon the one fact, however, that the citizen members should be in the majority.

As far as the administrative work of the commission itself is concerned, the organization of small committees for the handling of such matters as arise with great frequency, like zoning amendments, thoroughfare improvements, and passing on subdivision plats, has several obvious advantages. Through such committees the work of the commission can be better distributed, action expedited, the time of the whole commission conserved, and the interest and sense of responsibility of the individual members developed and sustained.

Relations between planning bodies and other governmental agencies, no less than with the public at large, are delicate operations requiring a maximum of tact, diplomacy and honest endeavor. With the governing body itself this relation should be one of helpful coöperation. No partisan feeling should ever be permitted to color plans or to distort vision. The chief executive of a State or of a city, the members of the legislature and of the city council or the board of selectmen, have a right to expect from a planning agency the maximum of assistance in making their administration a success. This does not mean that principle should be sacrificed to expediency, of course.

In its relations with other departments, the planning agency must again exercise the greatest amount of tact based upon good intentions. For the most part, the other departments have been in existence for years. They have experienced their full share of trials and difficulties and disappointments. For the most part also, they are perfectly willing to

coöperate once they can be assured that their own particular field will not be invaded, and that they will be given full credit for assistance rendered. A little more care on the part of the planning agency will satisfy this perfectly reasonable demand. After all, they have been carrying on for years, and planning agencies—particularly state boards, now coming into the field—would be quite helpless without this assistance.

As far as public relations are concerned, this is a highly important and oftentimes overlooked opportunity. There are various means by which relations between the planning agency and the public may be made productive. One method which has been tried successfully in certain local communities is an advisory committee on public improvements, or citizens' plan association, representative of the various civic organizations in the community, whose function it is to coöperate with the planning board in any important problem under consideration, bringing to the board a cross-section of general public opinion. It is much easier to familiarize a small representative group of this sort with a plan than it would be to educate the general public. This group, if made up of representatives of civic organizations, will serve as a nucleus from which the idea will gradually spread throughout the entire membership.

The introduction of planning education into the public schools offers such a fruitful field that the only wonder is that it has not been more generally cultivated. The New England Town Planning Association has made a commendable start in this direction in suggesting that existing courses in civics give a new emphasis to community service and that the project method be used in carrying the civic interest further and giving it direct practical application. School curricula in many instances are overcrowded, but there is little doubt that a carefully prepared schedule, worked out in coöperation with the proper school authorities, and tying up the loose ends in civics, government, sociology and economics into a workable planning study program, would be cordially received.

And, finally, the newspapers—last but by no means least. Their primary function is the dissemination of news. They cannot and should not be expected to take over promotional work or propaganda. They must print that for which the people are willing to pay to read. If planning information can be furnished them on this basis, it will invariably find a ready reception, both in news columns and on editorial pages.

INTEGRATION OF TECHNICIANS' WORK WITH ADMINISTRATION

Since few planning commissions have ample financial resources, it has not been possible for the majority to retain complete technical staffs capable of advising on the problems which comprise the planning commissions' work. It has been customary for the commissions to retain experts from various professions to assist in formulating planning programs and to advise with the commissions on technique and policy.

Some planning commissions do have technical staffs, and outside advisers are called in from time to time on special problems, while many commissions have had to retain professional planners who have been required to formulate the entire planning program.

Experience would seem to indicate that the preparation of technical work for a planning commission is the easiest to accomplish of any part of a planning program. The integration of a technical plan into the planning law and administration of any city is by all odds the most difficult part of the job. While planning technicians have prepared many excellent plans for our cities, the results in definite and practical accomplishment have fallen short of possibilities. The problem confronting professional planners today is to find the most practical means of making their plans effective.

Fundamentally, there has to be a social consciousness in any community which undertakes city planning, directed to the point of view of the necessity for the replanning of the city and a willingness to join in the effort to re-orient its physical pattern. The great difficulty in making any technical plan effective is the apathy of the general public to governmental problems and the inclination to be uninterested except where personal affairs are concerned. It is to be expected that under our system of city government a considerable period of time would be required for the mass of the citizens to realize the implications of city planning and its necessity in the well-being of the community. However, the direction of community life falls upon civic leaders in various fields and if planning is to become effective in any city, the city planning commission must assume the leadership in integrating its plan to the administration of civic affairs.

City planning commissions are often composed of citizens who may have no desire to mingle in the political affairs of a city. If their work is to be successful, however, they must make themselves part of municipal government and they must assume a definite, aggressive stand in the community with regard to their own programs. While there are many city planning commissions in existence, too many of them apparently have gone to sleep on their jobs. The planning history of city after city is that of comprehensive and careful work prepared by qualified technicians which the commissions themselves have allowed to be shelved. There is little the best planning consultant can do to secure the effectiveness of his plans unless the city planning commission itself is alive and aggressive and is striving to make itself a definite part of the city government.

Under the best of circumstances, a planning commission will be seriously handicapped in carrying out any of its plans unless it has a capable executive officer. Even if the commission itself is not outstanding in capability, there is much more possibility of making technical plans effective if there is an administrative officer, devoting his whole time

to the affairs of the commission. Such an officer should be on a par in salary, personality and prestige with other department heads in the municipal government. The functioning of such an officer brings him in daily contact with other departments of government so they can come to know and appreciate the purposes of the planning commission, to understand its objectives, and to have confidence in its recommendations.

Some departments of government, such as the building department, the legal department and the engineering department, are more closely related to planning work than other departments, but if the various divisions of the government are kept intimately in touch with the planning office, there are greater possibilities of securing constructive results. The need for close coöperation and intimate contact is obvious where the commission has employed outside consultants to prepare plans which affect other departments. The older, more established branches of municipal administrations have become more or less settled in their ways and in some instances may be jealous of their prerogatives. It requires skill to deal with the other administrative heads; if by constant contact and by seeking advice, the other departments can feel they are having a part in shaping the planning program, there is much greater possibility of success in later administration.

For this reason it is most important that there shall be continuous contacts between the planning staff and the staffs of all administrative departments and independent boards. These technicians should exchange information and ideas, and should iron out differences, if possible while the plans are still in preliminary form. Perhaps there is no other phase of the administrative procedure of the technical staff which is quite so helpful to the effective functioning of the commission as this continuous, informal collaboration with the administrative staff of the city government. It affords one of the best possible means of intermeshing the work of the planning commission with that of the administrative departments.

At the same time, the chief and other members of the technical staff should be careful not to encroach upon the premise of the planning commission itself. The work of the technical staff should be confined to the making of investigations and studies, and the preparation and interpretation of reports for the commission and its committees. At hearings and meetings, especially on major matters of controversial nature, the head or other member of the planning staff, when called upon to testify, should confine himself to the presentation of the technical features of the problem. The presentation of the general point of view and the non-technical considerations in explanation of the plan recommended by the planning commission, or the stand taken by it on a particular question, should be made by the chairman or other member of the planning commission itself. The function of the technician is to advise; the final responsibility rests upon the shoulders of the planning commission itself.

Even if the planning commission is a live and thriving body and the commission has a capable staff through which to focus its activities, there is always a very real problem in securing the enactment of the planning objectives into law. The preparation of the technical phases of a city plan require much research and deliberation and quite often a technician's work is not easy to explain or to understand. There should therefore be some relationship between the legislative branch of city government and the planning technician while the work is in process of formation. If the planning consultant is shaping a thoroughfare plan for the city, the street committee of the legislative body should be constantly advised with, along with other administrative branches of the government.

Each community has its individual methods of handling the details of municipal affairs. While planning commissions are established in a somewhat similar method in most cities and while their fundamental objectives are similar, the details of their technical plans, the relative importance of certain phases of the plans and the methods of making them operative must necessarily differ in each community. In making planning effective much depends upon the use of practical and sound common sense. Unless every effort is made to make planning fit the practical needs of a city and unless there is energy and ability displayed by the commission and its staff, there is little opportunity in the long run for securing a thorough integration of any plan to the administration and planning law of a city.

PLANNING PERSONNEL

It rarely happens that the individual members of a planning board, even though appointed from a field closely allied to planning, are technically qualified to make a plan, nor is it intended that they should do so. This presupposes a permanent planning staff, which in the case of cities of 100,000 or more should consist, as a minimum, of an experienced city planner, at least one draftsman and a stenographer. Perhaps even in cities of from 50,000 to 100,000 the commission should have a full-time engineer who might also serve as secretary of the zoning board of appeals. A professional opinion might serve in many instances to counteract emotions and result in upholding the integrity of the zoning plan. In smaller communities the city engineer or his assistant might be assigned to act as part-time engineer for the planning commission and the zoning board of appeals.

As a matter of fact, many local boards have been able (and frequently compelled) to supplement inadequate appropriations with work of city or town engineers. Where full coöperation between departments exists, this arrangement may be found fairly satisfactory within certain limits. It is a fact, however, that while the knowledge of existing conditions by the city or town engineer makes his coöperation essential, his necessary

preoccupation with the administration of his own day-to-day program is bound to conflict with a broad study of the future resources, needs and possibilities of the community which could be more effectively studied by an agency, properly equipped, and free from administrative duties.

Communities smaller than a quarter of a million population are rarely able to maintain a planning staff competent to provide all of the services the commission may require. Neither would this be justified in the smaller communities. All such planning commissions should have available to them the services of a planning consultant, on a per diem or similar basis, who would be called upon to advise them on matters of unusual complexity or importance beyond the capability of the regular planning staff. One suggestion offered is that state planning boards and state municipal leagues might make arrangements with planning consultants for the rendering of these services to communities, to be financed by annual contributions of the communities for the maintenance of the service. Another suggestion is that a group of planning commissions might pool their resources and employ a professional consultant, each commission paying a part of the cost of such service, which would be available not only for advice on local individual problems but also on common problems of a regional nature in which two or more of the communities were involved. It would seem perfectly possible that joint action by a number of relatively small communities might in this way develop eventually a single permanent staff that could function for the group, no one of which might require, or be able to finance, a permanent staff for its own services.

In building up a permanent staff, certain local conditions must be taken into account. In some communities appointments must be made from the civil service lists. This practice, particularly in recent years as the concept of planning has gradually broadened out, has its drawbacks. Under this system it is not always easy for the planning agency to draw in some specially well-trained person for a particular job if there is a list awaiting certification.

Where basic data are to be collected for the development of a master plan or for the preparation of a zoning law, special appropriations may be sought, permitting the employment of special assistants over and above what would be adequate for an average year. In any community of substantial size, however, there are continuing problems needing the consideration of the planning commission; their consistent study can be done adequately only if there is a permanent staff available. While members of the commission itself, if technically trained, may and often do furnish a large amount of valuable professional service free, such voluntary assistance, while greatly increasing the value of the work, cannot take the place of the steady attention and efforts of permanent employees.

About all that may be said, therefore, without fear of contradiction,

so far as the planning personnel is concerned, is that planning agencies should make their best efforts to get the best material available and then make the best of it, keeping in mind at all times that planning is a highly specialized field which merits the very finest type of technical training.

PRODUCTION AND USE OF TECHNICAL REPORTS

A public opinion informed on affairs of government is becoming increasingly recognized as the *sine qua non* in a democracy. This holds true of government on all levels—Federal, state and local—but particularly for local urban government. Important media for keeping the public in touch with the work of the planning commission, and for maintaining its interest, are carefully prepared and judiciously distributed reports giving account of the commission's plans and accomplishments. For the purpose of organized discussion, planning reports may be divided into three categories: (a) formal reports, (b) periodic reports, and (c) current reports.

Formal Reports: Before a planning commission is in a position to function with competence, it must make a thorough study of the community, trace the trends that produced the city as it is, identify the forces responsible for these trends, and project general plans for its future development and redevelopment. The results of these studies should be published either in one volume as the comprehensive plan of the city, or, in the case of a large community, in several volumes corresponding to the major functional divisions of the comprehensive plan.

The report should contain all of the major plans and proposals developed by the commission, except that summaries, tabular or otherwise, might be substituted in place of the full text of the zoning ordinance and subdivision regulations. These are usually more widely distributed than the general planning report and are of direct and sustained concern to certain professional and business interests. For these and other reasons they will have to be reproduced separately.

The general specifications for the report on the city plan are no different from those for any good report written for wide distribution. Most important to remember in the writing of the report is that the audience to which it is addressed is to all intents and purposes the man in the street, and not members of the technical professions. The text should be clear, alive and as concise as possible. Only that which pertains directly to the commission's activities, plans and proposals has a place in the report. Detailed technical descriptions of the principles and techniques used in developing the plans or arriving at solutions are of interest to the student, but they are worse than useless in a report addressed to a lay audience, because they are discouraging to the conscientious readers. The temptation to write a textbook on city planning should be resisted. Enough of the substantiating material or data should be included to make a convincing case; but these are most effective and

most likely to receive attention if in the form of simple and attractive charts or other illustrations, instead of complicated statistical tables. Color greatly adds to the attractiveness of the report and is recommended if adequate funds are available.

The introduction should state the function and duties of the planning commission, its history and organization, and the purposes to be served by its efforts and by the plan. The state law and municipal ordinance from which the commission derives its authority and which stipulates its duties and functions should be given in full as one of the appendices. The introduction should be followed by a summary of the major proposals of the plan and of the program of the most pressing improvements recommended by the commission. The body of the report should contain all maps and plans which constitute the program. Photographs, charts and even cartoons should be generously used whenever these can help to attract attention or to illuminate, illustrate or dramatize the text.

As regards distribution, a suggestive typical list would include: public officials, civic organizations, schools, parent-teacher associations, libraries, professional groups, business associations, utilities, neighborhood associations, garden clubs, welfare associations, and a list of citizens of manifested interest in civic affairs.

For still wider distribution it is desirable to publish the salient features of the city plan in the form of a brief, well-illustrated, popular pamphlet of perhaps not more than twenty-five pages. The use of a format which can be mailed out in the ordinary business envelope has been found convenient. Examples of this type of publication are "A Close-Up of the Regional Plan of New York and Its Environs" by the Regional Plan Association, Inc., of New York, and "Dayton and Its City Plan" by the City Plan Board of Dayton, Ohio. Often the purpose which such a pamphlet is intended to serve can be accomplished even more effectively by arranging with the newspapers for a special supplement to a Sunday issue. The completion of the city plan by the planning commission, its transmission to the city council, or imminent release of the printed report are the times when the papers are most likely to be ready to give generous space to its synopsis or review. Intimate coöperation by the planning commission in preparing this issue would help to guard against inaccuracies and wrong emphasis. It is desirable and often possible to arrange for reprints for future distribution.

The planning commission should issue an annual report of its own even when a brief account of its activities is included in the general municipal report.

In the annual reports the statement concerning the history, organization, duties and functions of the commission should be repeated and a copy of the state law and municipal ordinance again given in the appendix. In a brief summary the activities and accomplishments of the commission during the year and its proposals for the coming year, should

be set up in a style which will attract attention. Besides the résumé of the commission's routine activities, like passing upon subdivision plats and petitions for zoning changes, the summary should give the more important projects carried out, mention whether these conform to the comprehensive plan or not, whether they were initiated by the commission, and whether they were approved or disapproved by the commission.

In the larger cities a chart should show the organization of the commission and its staff. This chart should be accompanied by a simple table giving the commission's expenditures broken down into a few significant items. The table should include figures for two or three years.

In the body of the report the services, activities and accomplishments of the commission during the year should be described in some detail, accompanied by such maps, charts and photographs as are necessary for illustration and clarification. As in the report on the city plan, pictorial presentation of statistical material should be resorted to whenever possible.

The account of services should include such unofficial activities as the number of consultations with subdividers and petitioners for zoning changes, conferences with groups interested in major projects, and addresses before organizations. The report on the amount of subdivision activities and zoning amendments should interpret official activities in terms of the entire community structure, analyze trends and contrast them with previous years. The extent to which the carrying out of a thoroughfare plan was advanced by rights-of-way dedications in new subdivisions and by the enforcement of set-back lines should be illustrated.

There should be a list of all public improvements carried out, and of those for which plans have been perfected and adopted during the year and which are subject to the commission's jurisdiction, the relationship of each such project to the comprehensive plan, the commission's action on the project, and the actual or estimated cost of each. In addition, the particular defect which has been remedied or is intended to be remedied by each major project and the benefits to be derived therefrom should be explained.

The report should contain as one of its major features an inventory of land use and municipal land ownership. A summary table and illustrative chart should show the way the total area of the city is divided among the major land-use types, and another the amount and use of land in public ownership. Corresponding figures for two or three previous years should be shown and attention should be called to the more important changes. The amount and cost of land acquired by the city and the amount of land sold and moneys received by the city should be given. Trends in the cost of land acquired by the city and in the prices received for lands sold are significant pieces of information from a planning standpoint which are not likely to escape notice by an observant reader.

Additions, revisions or refinements of the comprehensive plan should be prominently featured in the report, especially if they are of major character. Detailed building statistics belong in the report of the building inspector or building department, but an analytical statement concerning changes in the housing situation, as conditioned by new construction and demolition, is properly a part of the planning commission's annual report.

Finally, the report should contain both the long-range program of improvements and activities and the program recommended for the coming year. The need for and purpose of each recommended project in next year's program should be explained and approximate estimates of costs given, if available.

The annual reports of the commission should receive the widest possible distribution. The mailing list of the general municipal report with such revision as necessary to reach groups and individuals taking particular interest in the development of the city, can be adopted. At least one family in twenty, and preferably one in ten, should receive a copy.

Periodic Reports: These reports may have for their subject important studies or project plans affecting the whole or a substantial part of the community, such matters as a comprehensive review of the zoning ordinance, of the thoroughfare plan, or additions to the city plan, like a comprehensive slum-rehabilitation scheme or flood-defense plan. Everything that has been said about the original city plan report applies to reports of this kind which, in fact, may be issued as supplements to the original plan report.

At intervals the commission may desire to issue a special report, summarizing the accomplishments under the city plan. "From Plan to Reality" by the Regional Plan Association, Inc., of New York, is a good example of this type of report.

A distinctly different form of planning reports is the bulletins, such as "Progress" by the Municipal Planning Association of Pittsburgh, and "Information Bulletin" by the Regional Plan Association, Inc., of New York. When published at frequent intervals, these might more properly be classed among the current reports.

Because the general orientation of these bulletins is educational and promotional, they are usually published by citizens' associations backing the city plan, instead of by the planning commission itself. Most of the material for them is, of course, obtained from the planning commission. Intended for wider distribution than the reports of the commission and being of unofficial character, they are generally more personal in style than the commission's reports—somewhat between the style of these and the newspapers.

These bulletins describe and comment on the commission's activities and the progress being made on various major projects and studies, call attention to certain pressing needs and other matters of current interest.

Accounts on what other cities are doing, or comparisons with conditions elsewhere, are effective to stimulate local interest and activities.

Current Reports: First among the reports in this category should be mentioned the technical reports of the staff of the planning commission which are the source of most of the factual material for all of the other reports herein discussed. The staff should submit to the commission a separate written report on every proposal to be acted upon by the commission.

There is no need to go into the *desiderata* of a good staff report. A technically competent staff can be relied upon to produce it. One or two general comments may not be amiss, nevertheless. In order to save the commission inspection in the field, the staff report should describe and illustrate fully, by maps and photographs when necessary, the existing conditions pertinent to the problem or proposal. It should discuss the relationship of the project or proposal to the comprehensive plan, as the first and most important consideration. The examination and appraisal of the proposed project should be limited to its planning aspects.

There is no better channel than newspapers for continuously reminding the public of the existence of the planning commission and to inform it about what the commission is doing. The commission's office should be on the regular beat of the city hall reporters and its meetings regularly attended by them. The newspaper men at the city hall are usually eager for news and need little encouragement. Friendly relationships and coöperation between the commission and the reporters can best be fostered by taking them into confidence. Let them have the agenda of the meeting in advance and let them glance through the staff reports if they need the time to prepare the copy, with the understanding that this will be held until the commission releases it. On important or controversial issues, it will be well for the commission to furnish the press with a written statement.

Newspaper men are shifted about. They rarely stay in the city hall long enough to acquire an insight into governmental affairs. Newspaper copy usually has to be prepared in haste; it may state the facts inaccurately, give the wrong emphasis, or otherwise distort the real story. Any copy prepared by the staff, on the other hand, is likely to miss the "news" and will be otherwise unsuitable, unless prepared by someone experienced in newspaper work. Prompt review of the reporter's copy by the director or secretary of the commission is a good way of solving the problem.

The place a planning commission occupies in the community can be fairly judged by the number of column-inches given its affairs by the newspapers. Regular reporting of the commission's meetings is the minimum newspaper publicity of a planning commission which functions vigorously and whose work is recognized by the community.

The planning commission should report itself in municipal journals;

not only should the official proceedings of the meetings be published in full, but any obtainable space should be utilized for informative and interpretative articles on planning, on the city plan, and on specific proposals of the commission. New York, Boston, Cincinnati and Columbus publish such journals or bulletins. In preparing articles and publications for the journal, the assistance of the official charged with its editing should be enlisted by the commission. A plan or a couple of photographs with a few lines of explanation or interpretation will be welcomed by the reader of "Legal Notes" and "Invitations for Bids."

For the sake of completeness, the radio, periodic municipal exhibits, and permanent library and school exhibits are mentioned here as supplementary media for publicizing planning and for reporting the activities of the planning commission.

SUMMARY OF DISCUSSION

Because of limited experience, the discussion was confined to administration of local planning offices, rather than of county, regional, state and Federal agencies. Miss Herlihy, as Chairman of the Committee, expressed the opinion that the same principles were valid for offices in all levels although the actual mechanics of administration might be quite different.

The organization of small sub-committees within the planning commission itself was felt to be of benefit. These committees usually are ones on: zoning, transportation, thoroughfare improvements, public improvements, public relations and, in some instances, traffic.

Educational work through introduction of planning discussions into public schools was suggested as a fruitful field of effort, as well as continued dissemination of news through the public press. Recognizing the apathy of the general public toward governmental problems, the committee expressed the opinion that a realization of the necessity for the re-planning of the city and a willingness to join in an effort to reorient its physical pattern were to be looked upon as fundamental on the part of the community. It was the consensus that the planning commission should assume leadership in integrating its plan to the administration of civic affairs. In order that this may be accomplished, capable executive officers should be provided for planning commissions. Through them constant friendly relationships can be maintained.

A definite line of demarcation between the function of the technical staff and the commission itself was pointed out. The commission is the policy-making group and the technical staff provides advice to it.

The suggestion that for cities of 100,000 or over, at least one engineer, one draftsman and one stenographer be retained as a full-time staff met with considerable discussion. Those in attendance expressed opinions that the planning technician need not necessarily be an engineer, but

might properly be a landscape architect, architect or even (if properly qualified) one without any technical experience whatever.

The committee felt that plan commissions should prepare comprehensive annual reports, augmented by pamphlet reports and bulletins. It was pointed out that some commissions publish three- or four-page reports summarizing their activities at frequent intervals.

Discussion leaders felt that the planning agency might well be established as a distinct department, with its own budget, thus becoming a permanent and integral part of the city administration.

Others were of the opinion that a planning director, working under the supervision of an unofficial advisory committee, would be preferable to the existing practice of official plan commissions advisory to the city planner and his staff. It was felt desirable to appoint commissioners for overlapping terms which often exceed those of the elected city councilmen making the appointments.

Trends in Planning Law, Legislation, and Litigation

COMMITTEE

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DWIGHT G. MCCARTY, *Chairman, City Planning Commission, Emmetsburg, Iowa.*

IRA S. ROBBINS, *Counsel, New York State Board of Housing.*

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DISCUSSION LEADERS

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IN ORDER to define the scope of the subject of this report, one must state what the word "planning" is intended to mean when used in connection with law or legislation. The mental processes covered by the word "planning" are present and are necessary in every human action, except such exclusively emotional or instinctive actions as a sudden stepping out of the way of an automobile coming down upon one. In so relatively simple and frequent an act as crossing the street, ascertainment of facts and the application of logical reasoning to those facts are involved. When a policeman arrests a drunken man, he necessarily seeks facts concerning the condition of the man and the cause thereof and then goes through a reasoning process as to what to do. All of this is planning. So if the word "planning" were in this report used in its all-inclusive sense, we would be discussing all the laws of the land; for all laws would be planning laws.

Locating and constructing a street or a playground or any other structure obviously involves planning. When a city engineer defines the specifications for a bridge, he surely has to plan. A state highway department's state highway plan by its very terms and necessities is planning. If, therefore, this report were to include all laws relating to the determination of the characteristics and location of all structures and uses on, upon or of the lands and the waters, then about half of all the codes of all the States would fall within its scope. So we must here be talking about something different and more limited.

This differentiation and limitation must be based upon certain assumptions. These assumptions, expressed in very general form, are that there is a special science or art, special modes of investigation and analysis that differ from those required when the task on hand is the determina-

tion exclusively of specific structures or uses as an independent problem. Consequently special types of learning and experience are requisite in the case of this different and more limited planning with which this report is concerned.

One of the essential ingredients of this specialized type of planning is that the unit of search for the facts and the process of reasoning applied to those facts is territorial, as the nation, state, region, county, city; distinguished from functional, as the street, playground, river pollution, forestry. A second essential characteristic is that the purpose of this search for facts and reasoning thereon is that of discovering and taking into account interrelationships, producing coördinations, balance and adjustments amongst all the functional uses of the lands and waters as distinguished from the concentration upon a single functional use treated as an independent subject of investigation and thought. A third characteristic is that the process of fact-finding and analysis aims at guiding development for long periods of time as distinguished from being engaged upon that which is intended to deal with the immediate. And a fourth essential is that these specialized aims require their own specialized official organ as distinguished from the legislative and administrative organs which have charge of the various functional structures and uses constantly dealing with the immediate. For instance, if there be a statute providing for the construction of freeways containing no provision for the integration or coördination of the location of the freeways with the location of the other functional types of structures or uses within a designated territory, such integrating or coördinating process to be in charge of a planning organ like a planning commission, then such a statute is not a planning law within the meaning of planning as used in this report.

The methods and techniques for this particular type of planning are those which we call master or comprehensive planning; and a planning statute necessarily either explicitly or implicitly provides for comprehensive or master planning.

As on every other subject or definition in this complicated world of ours, there are twilight zones, shifting boundaries, reservations and exceptions. Into these we will not attempt to go.

NATIONAL PLANNING

As yet there has been no national planning legislation. The National Resources Committee still exists by virtue of presidential decrees under relief legislation. Its functions as defined in the executive order include national planning and, as we all know so well, have been so interpreted and applied. In the Federal relief measure which has just been enacted, an appropriation has been made for the National Resources Committee, thus furnishing a congressional recognition of these national planning functions. Still it cannot be said that any legislation for national plan-

ning has as yet been formulated and enacted. Statutes relating to specific functional subjects, such as flood prevention, pollution and so on, are full of phrases like "making plans," "coöperating with other federal and state agencies," "conferring with other agencies" and that sort of allusions to procedures which are similar to the process of comprehensive planning; but a national planning organ outside of the constructing and administrative departments and agencies, has not as yet been created by national legislation.

INTERSTATE REGIONAL PLANNING

The regional planning sections of the Tennessee Valley Authority act still remain the only legislation for large interstate regional planning.

The Norris and Mansfield bills in Congress, colloquially referred to as the "little TVA bills," furnish material upon the problems of legislation for the planning of large interstate regions, but as yet there has been no crystallization of them into effective legislation.

STATE PLANNING

The past five years have witnessed a sweeping development of state planning legislation. Over forty States now have statutory provision for state planning agencies.

The main subjects for discussion concerning this statutory development may be said to be three in number: namely, the personnel of the planning organ, the description of the scope and the subject matters which, on the face of the statute, are entrusted to this organ, and the force and effect given to the work of the planning agency in relation to the administrative and legislative agencies of the State.

As regards the personnel of the planning boards, the main difference amongst the state planning laws is the relative strength of ex officio and citizen representation. Predominantly the statutes provide for both types. Naturally the designation of particular officials for ex officio representation varies from State to State. It would be difficult to discover in these statutes any specific principle regarding the particular functional classes of administrative officials which it is deemed essential or important to have upon the planning board. One valuable trend appears in the growing provision for representation from universities. As regards the ratio between the ex officio and citizen memberships, nothing in the nature of an accepted principle can be said to have developed. In so far as there is any definite tendency, it is probably in the direction of an increase of the strength of ex officio membership. The bases of the membership have, of course, very decisive effects upon the character or type of work undertaken. Probably administrative officials are more skeptical about the value of the master planning techniques by means of which the planning body, acting as a body independent of the administrative organs, develops data, principles and conclusions which

form an instrument for the coördinating and integrating of the departmental projects and problems, as distinguished from special studies or special subjects made for the administrative departments, or from a mere group meeting of the administrative officials at which they do their own coördinating and programming. The statutes usually provide for a director of planning, who, being an official independent of the administrative departments, may, in the course of time, bring about some acceptance of the master planning concept and gradually forge the instruments for the application of that concept.

The state planning statutes do not provide for representation of the legislative organ of the State on the planning board, and the trend is distinctly toward treating the planning organ as an arm of the executive.

While practically all state planning statutes contain general phraseology from which the right of the planning board to enter into what is called economic planning could be extracted, in most of the statutes there is emphasis upon the planning, as it is usually expressed, "of the physical development of the State." A large proportion of the statutes contains express statement that the main function and duty of the planning board is to develop a master or comprehensive plan, the expression usually including mention of a number of types of specific functional subjects, these provisions being couched in language analogous to the typical master planning sections of municipal planning laws. As we all know, there is a somewhat growing fear of the word "master"—a fear which fortunately has not as yet come to include the word "comprehensive." The fear of the word may be the fear of the thing itself; and if we are to obtain master or comprehensive planning, we had better obtain words which mean that. The statutes which avoid "master plan" all contain so comprehensive a statement of what the planning board may take an interest in and report about that a very comprehensive master plan would constitute a modest part of its work indeed.

There is, perhaps, a trend toward avoiding a list of functional subjects (roads, forestry, recreational areas, etc.); but as powers under general expressions are larger than under more specific expressions, this tendency does not mean any lessening of the authoritative scope of the work of the planning boards, though it does make such statutes less educative.

All the statutes, regardless of how short or long (and perhaps the tendency is towards brevity) include the power expressed or implied to make special studies of special subjects, to coöperate with administrative, legislative and planning agencies, State, national, regional and local, and to advise upon almost everything. In short, all the statutes contain about as much power to do real planning of the States as the governors will permit and the legislatures will pay for; but, as for planning, in so far as it has a meaning of its own, namely the gathering, organization, analysis and interpretation of basic data and a formulation of texts, maps and designs which will be instruments for the stimulating, coördinating and

integrating of the program of the development of the State, some express mention of master or comprehensive planning is certainly useful and may in practice prove to be essential; and any tendency, of which there is evidence, to disguise or evade this mention should be counteracted.

As regards the right of the planning agency to influence or, more strictly, its right to an opportunity to influence administrative and legislative action, some of the statutes, though not the predominant number, require the individual projects of the administrative organs, so far as their location, character and extent are concerned, to be submitted to the planning board, and require the administrative official, in so far as he departs from the advice of the planning board, to state his reasons publicly. Of course every state planning board has more or less opportunity to know what is under way in the departments; and a few of the statutes require the departments to keep the board informed of their pending and contemplated projects. In the drafting of future legislation, we must be on our guard against allowing the state planning agency to be shoved aside or become occupied with miscellaneous matters and be given too little opportunity to know about, study and advise about and to receive genuine administrative cogitation about its advice upon the actual projects under way.

INTRASTATE REGIONAL PLANNING

There is a distinct growth in the quantity of legislation providing for intrastate regional planning commissions and plans. This growth includes some special statutes dealing with regions specially defined in the statute itself. An analysis of experience would probably indicate that more regional planning actually gets done under these special statutes than under the general enabling acts. The general enabling acts in this field are usually a part of the county planning statutes, and permit the creation of regional planning units composed of a part of a county or county and a city, or the whole or parts of two or more counties, or combinations of parts of counties or of municipalities and parts of counties.

Sometimes the statute expresses the factors on the basis of which the determination of the regional boundaries are to be made, as for instance, the existence of a large degree of economic unity or social unity or unity created by a large number of common developmental problems. The decision upon the creation of a region and the defining of its territory is in some States reposed in the governor, in others in groups of citizens or groups of officials of the different subdivisions within the proposed region, and in still others in the state planning board. Perhaps the grant of this power to the state planning board indicates a trend. Practice and experience under regional planning legislation have as yet been so short that amendatory legislation has not appeared upon them. Definite trends in this field are hardly as distinguishable by means of such crude instruments as are the annual or biennial session laws of the States.

The powers granted to these regional planning commissions in the general enabling acts are quite analogous to the customary provisions of municipal planning legislation, and for that reason require no extended description.

COUNTY PLANNING

Next to state planning legislation, county planning is the field which in recent years has witnessed the largest legislative growth.

The general county planning enabling acts follow in general the model of the more typical city planning statutes, of the department of commerce standard city planning enabling act or the Bettman county planning model in the Harvard book on Model Planning Laws. They provide for a county planning commission composed of ex officio representatives of the governing body of the county and, in some, also the county engineer, plus citizen representatives. They specify the master plan as the major function of the planning commission, usually with mention or listing of specific functional subjects which belong in a master plan.

One important trend in this phase of county planning legislation is that the enumeration of these functional subjects reflects the recognition that planning concepts and techniques apply equally to rural and to urban or suburban development. For instance, in addition to the functional subjects appropriate to urban and suburban areas, such as streets, public buildings, utilities, etc., such subjects as forests, agricultural areas and land-utilization programs are in the lists of contents of the county master plan. Similarly, in the statement of purposes or motivations of the planning, these typical county planning acts include, in addition to those customarily carried in the better city planning acts, such matters as conservation, production of food supply and others peculiarly applicable to the rural counties. The city planning acts mention population distribution which would tend to reduce congestion; the county planning statutes add an excessive scattering of the population as a form of waste to be reduced through master planning.

In short, the county planning enabling statute as it has come to be developed covers all types and degrees of development, highly urbanized, suburbanized, to be suburbanized, exclusively rural and mixed. This is a welcome recognition of the fundamental truth that though the factors to be taken into account vary from place to place in accordance with the nature of resources and developmental history, the fundamental planning concept, the nature of the organ for the application of that concept, the intellectual processes for the application of that concept and the technical devices for the application of that concept are identical whether the territorial unit be city, county or beyond and whether the present or future development be of an urban, suburban, rurban or rural nature.

There may be tactical or political reasons for dealing with types of political subdivisions or of governmental areas by separate statutes, but

there is no fundamental intellectual reason. The general comprehensive county planning statutes of the above-described model furnish all the necessary statutory authority for rural as well as for urban planning.

County zoning is of course a part of county planning. The provisions for the zoning part of the planning and the other parts are sometimes contained in separate statutes, but as county planning legislation has come into being after the time when we began to recognize that zoning is simply a phase of planning, practically all definitions of comprehensive planning in the county planning laws include the zone plan, even where the zoning enabling provision is contained in a separate zoning statute.

County zoning legislation is developing at about the same rate as the other phases of county planning legislation. The trend in the form of county zoning legislation is in the direction of those forms which adjust to the county planning legislation of the above-described type and therefore follow the later models of municipal zoning laws rather than the older standard model of the Department of Commerce. As with county planning legislation, this form of county zoning act covers all those subjects of regulation and all those purposes which are appropriate to purely rural areas as well as the older expressions which were more appropriate to urban territory. Consequently these typical recent county zoning laws contain all provisions adequate for any type of territory, urban, suburban, rurban, mixed, rural, wild.

This form would furnish, for instance, adequate statutory basis for the famous county zoning of Wisconsin. The statute of Wisconsin does contain, however, one exceptional feature. We refer to the feature that the zone plan must be submitted to the governing body of each township within the zoned area and cannot be put into effect in that part of the area which consists of a non-assenting township. There is the power, though not the requirement, that the zoning be put into effect in the remainder of the area—that is, in the assenting townships. Now, as a zoning plan is supposed to be an integrated determination of the allotment and distribution of the uses of the land of the whole planned unit, on its face this provision of the Wisconsin law may seem to be a contradiction of fundamental principle. Where the territorial unit of the planning is fairly homogeneous in its existing and prospective development, as is the case, for instance, in the northern Wisconsin cutover country, and where the classes of uses to be provided for in the plan are few, as, in the same statute, forestry, recreation and agriculture only, the elimination of pieces of the territory such as a township might not break down the integrity of the plan. But in territories in which there is a great variety of classes of development, past, present and future, and the classes of use districts must therefore be more numerous, the elimination of specified political subdivisions from the plan may not be so sound.

There are some indications of a tendency to imitate this Wisconsin provision in other forms by making the effectiveness of the zone plan in parts of the zoned unit turn upon the consent of parts of the unit. For instance, a recent Michigan township zoning statute permits "districts" to eliminate themselves by means of popular referendum. Needless to add, that sort of thing is apt to produce unfortunate confusions.

Coming to the regulation of subdivisions in the non-municipal portions of counties, we find that the above-mentioned later models of county planning legislation followed in the present trend of county planning statutes, contain subdivision regulation provisions similar to those in the standard city planning act, the basic features of which are: that subdivision regulation is, theoretically at least, based upon the master plan or at least the thoroughfare part of the master plan; that the planning commission is the platting authority which passes upon and approves the plat and formulates the general subdivision regulations; that the acceptance by the city of any street, the furnishing of any public improvements or public services on the street or the like cannot be granted for any street or way which has not received the planning commission's approval without submitting the same to the planning commission; and sometimes the rule of minimum vote of two-thirds of the legislative body to overrule the planning commission's report is incorporated. The trend of county legislation is toward the acceptance of these basic features, that is, the acceptance of the planning commission's prime and central jurisdiction in relation to subdivisions of land. Of course there are some fairly recent statutes which, while giving the planning commission a part, place the prime or essential activities in the legislative body. We will not take time to go into the details of the variations of the distribution of jurisdiction between the planning commission and the legislative body.

As regards mapped streets or highways—that is, the mapping of the future road lines and the regulation of building development within them—provisions are contained in the same general models and have been placed on the statute books of some of the States in connection with the general county planning enabling act, so that in so far as there is any distinct trend it is in the direction of the adoption in the unincorporated areas of the principles and methods of municipal mapped street legislation.

CITY PLANNING

So far as the face of the statutes can be treated as indicators of trends, the trend regarding municipal planning is distinctly one of growth and enlargement. Within the States which have different classes of municipalities (cities of the first class, second class, etc.), the growth has been in the direction of covering more classes. The growth has further been in the increasing adoption of the type of statute based on the Department

of Commerce model, and models which have been developed from it. This means an enlargement of the scope of comprehensive planning by enlargement of the functional type of improvements which are expressly recognized as integral features of the municipal plan, and an enlargement of the expressed motivations or purposes of the planning.

On the first of these types of enlargement, zoning and housing furnish the most significant illustrations. The development of zoning legislation prior to general planning legislation had an unfortunate effect which is still far from being cured: namely, the treatment of zoning as though it were a subject separate from the process of comprehensive planning. One symbol of this separation of zoning from the other phases of the development of the municipal area was the reposing of the making of the zone plan in an organism known as the zoning commission which did not have charge of the other phases of the planning of the municipality. As this aspect was contained in the Department of Commerce standard zoning act, States are still enacting legislation which provides for this separate zoning commission; but the trend is distinctly in the right direction: namely, placing the planning of the zoning in the planning commission; and even where the recent statutes permit the creation of zoning commissions, they provide that where there is a planning commission in the municipality, it is to have charge of the zone planning.

Another statutory evidence of this separation of things which properly belong together was the fact that in the descriptions of the scope of the master plan, the earlier statutes did not mention the zoning plan as a part of the definition of the master or comprehensive plan, whereas following the later models, the trend displayed by the later statutes is happily toward the inclusion of the system of land-use regulation, which we call zoning, as a part of the process of developing the comprehensive plan. The scope of the zoning, that is, the types of uses to be regulated by means of zoning, and the purposes and motivations, has been enlarged in the direction of the inclusion of all modes of land use which are part of the life of the contemporary urban community, and of all the purposes and motivations which increasing knowledge and sociological research have shown to be needed for healthful and economic urban life.

The earlier planning statutes did not mention housing, for indeed at that time there was no public housing contemplated or authorized or in the offing. Since we are now in a period in which housing is recognized as a governmental province, obviously at least the general location and extent of public housing projects becomes a proper part of the allocation of the uses of the land amongst the various public and private activities. Housing has come to be more and more mentioned in the statutory definitions of the scope of the comprehensive plan; and planning commissions are being given the statutory basis at least for planning activity in relation to this important part of the field of municipal development.

So far as personnel of the municipal planning organism is concerned,

the principle of representation of both the executive and administrative organs with a majority of non-official members is being adhered to. The principle of the non-compensated lay board, with some ex officio representation, is therefore being kept in force, and, in so far as doubts have arisen as to whether that form or organization of the planning function is going to give satisfying results, those doubts have not yet been reflected in legislation. The occasional statute in which the planning organ is made a division of some administrative department can be accounted for by reasons of politics or tactics and not principle; and there does not seem to be any tendency to increase this placing of the planning agency within some other agency.

There is a notable exception to a part of the observations in the preceding paragraph, and that is the planning provisions of the new charter of the city of New York, which in some respects constitute the most significant development in municipal planning legislation. The charter recognizes the planning commission as having so much to do and such important things to do that its chairman is to be a full-time man with, as public salaries go, a high salary, and the other members are also to be paid on a basis which evidently contemplates that they will devote a very considerable part of their working time to the business of the board. The board itself, as distinguished from its staff, is therefore made a continuously operating body which is not a part of any other department but is given a status equal in dignity and importance to the administrative departments. What the consequence will be either on the side of the strength of the influence of the commission over the other agencies and departments of the city government or on the side of the fidelity of the commission to comprehensive planning as its main task, only future experience can answer.

So far as the definition of master planning and the legal effect of the commission's planning activities in relation to the administrative and legislative departments are concerned, the New York charter is not different in effect from the present models of general city planning enabling acts. There is one other significant difference which relates to capital budgeting and which we will discuss later in this report.

Naturally the growth of statutes based upon the later models has brought upon the state statute books to an increasing degree the provisions contained in those models on the subjects of subdivision control and mapped streets, and therefore represent a trend in the direction of increasing participation of the planning agency in subdivision regulation and the regulation of building within future street lines. It is of special significance that New York State which, while a pioneer in zoning and in official map legislation, held back on master planning, has in its more recent statutes increasingly recognized the planning commission as the agency and the master plan as an instrument in zoning, subdivision control and mapped streets.

A recent decision by the Supreme Court of Illinois is a danger signal that the older forms of subdivision law contain distinct weaknesses as compared with these newer forms. The effect of that decision amounts to this: that under those older forms of statute one can evade the regulation of one's subdivision and some parts of the zoning regulations by the device of calling the streets of one's subdivision "private." The dangerous possibilities of this form of evasion were well in the minds of those who drafted the Department of Commerce's standard city planning law, and the definition of subdivision regulation was quite consciously expressed so as to beat this evasion. Recent significant statutes of New York guard more expressly against any such types of evasion, for they declare all streets of subdivisions are private until the subdivider makes them public and he is placed under considerable pressures to make them public without undue delay.

TOWN OR TOWNSHIP PLANNING

The New York or New England type of town or township has for many years been included in planning legislation, including zoning. In other parts of the country where the township is simply a civil district of the county, no doubt the provisions of the general county acts which authorize the planning of counties or parts thereof, would authorize the treatment of these townships as planning units. There have been, however, a few statutes dealing specially with township planning, though nothing which as yet could be called a trend that way. This committee has no disposition to encourage any such trend. Consolidation of county units or regional units for planning is probably as desirable a general direction as such consolidation for purposes of administrative and legislative aspects of local governments. This is an aside.

JUDICIAL RECOGNITION OF MASTER PLANNING

As the strictly planning operations of a planning commission do not produce any changes in legal rights and relationships, naturally few litigations have arisen which involve an interpretation of the application of the master planning provisions of planning statutes. However, wherever the question has arisen, courts have enforced the planning laws without reservations. For instance, where some action of council requires submission to the planning commission, courts have upheld this restriction upon councilmanic power or this requirement of councilmanic procedure. A very eloquent tribute was paid to master planning in a recent decision of a high court of New Jersey, namely, in the case of Mansfield & Swett, Inc. et al *vs.* Town of West Orange (New Jersey Supreme Court, October Term 1937), 198 Atlantic Reporter 225. In this particular case the court invalidated the planning commission's disapproval of a subdivision plat, and rightly so; but like Chief Justice Marshall in Marbury *vs.* Madison, the New Jersey judge used the occasion for a larger purpose

than that of deciding the particular litigation on hand and spoke eloquently about the tremendous importance of master planning and of basing the subdivision regulations, the zoning and the whole community development upon the master plan.

SPOT-ZONING

Judging by the cases which come into the courts, we cannot feel any assurance that the trend of practice is in the direction of less rather than more spot-zoning. By spot-zoning is meant the determination of the zoning status of a single lot or other very small area in the light of the problems of that single lot or small area treated as the whole unit of consideration, as distinguished from treating the problem as one of the districting of the whole territorial area of the zoned community and the determination of district boundaries in the light of the treatment of the whole municipal or other territory as the unit of consideration. Of course in this definition of spot-zoning variances under the hardship clause are excluded; for if the hardship clause be interpreted with the appropriate strictness, and zoning boards of appeals or adjustment stay within their appropriate jurisdiction, with few exceptions the variances will be granted for exceptional topographic and similar physical features peculiar to the individual lot or small vicinity in question.

There are features in the standard zoning enabling act which tend to be promotive of spot-zoning rather than retarding, particularly the 20 per cent protest provisions and perhaps vagueness in the hardship clause which has been modified in some of the recent statutes; and, in so far as the trend is toward the new types of zoning law models, the trend of the law of zoning may be said to be toward a lessening of opportunity for spot-zoning.

Of course none of the statutes on its face permits spot-zoning, for all of them expressly provide that zoning regulation shall be by districts, which means that nothing smaller than the district shall be the territorial basis for the classification in the ordinance. Nevertheless, for one reason or another, spot-zoning is a very prevalent disease of zoning practice, and to a somewhat discouraging and certainly an irritating degree, the courts seem to have a hard time realizing that it is the whole zone plan for the distribution of land uses by districts, in which the predominant motivation is the design of future development of the whole territory of the city in accordance with an integrated plan, which is before the court in each case. To what extent the planners and the lawyers have contributed to the blinders which produce the over-focusing of judicial eyes upon small spots is a question upon which no research has as yet sought the answer. The decisions disclose that the better the board of adjustment or appeals, the better the judge-made law; and the more thoroughly honestly and genuinely the zone plan is based upon comprehensive planning principles, the better the judge-made law.

An encouraging and splendid judicial recognition of the true principle of zoning as a regulation of future development by the method of a comprehensive plan is a very recent opinion in a Virginia case, West Bros. Brick Co. *vs.* City of Alexandria, 192 Southeastern Reporter, 881; 82 (Law Ed.) Supreme Court Reports 259.

ZONING PUBLIC BUILDINGS

A few of the statutes expressly authorize the inclusion of public buildings within the zoning regulations, and there can be little doubt that this inclusion may be implied from the general provisions of the zoning enabling acts. City governments are quite apt to violate their own zoning ordinances, in the sense of putting non-residential public structures and uses in the midst of residential zones. Special difficulty arises where the government entity which builds within the city is other than the city government itself, as, for instance, the county or state buildings, state highways and other non-municipal public structures. State statutes can of course expressly require all these buildings to be subject to local zoning restrictions, and the statutes display some tendency to include such a requirement. The Federal Government is often rather high-handed about the subjecting of its buildings to zoning and planning regulation, and claims constitutional immunity; and the judicial decisions favor this immunity, though we should not accept this immunity as established beyond contest. Naturally as the Federal activities within the local communities increase, which means the Federal Government builds more structures within the local areas, of which housing projects are today an outstanding illustration, the reasons for requiring Federal structures to fit into the local zone plan become increasingly impelling. There is no trend in Federal legislation toward recognizing this.

CAPITAL BUDGET AND IMPROVEMENT PROGRAM

That the participation in the formulation of a capital budget or improvement program falls within the appropriate activities of a comprehensive planning agency, has been accepted for many years. The Department of Commerce's standard city planning enabling act provided: "The Commission shall from time to time recommend to the appropriate public officials programs for public structures and improvements and for the financing thereof." A provision of that import or effect has become or is becoming customary in city and other planning legislation, and many city planning commissions have for years participated in the development of shorter or longer public improvement programs and capital budgets.

In its new charter New York City has made a leap which in this item lands its planning legislation far beyond anything contained in any other measure; for there the planning commission is designated as the capital budget-making agency, not in the final legislative phase of the adoption

of the budget as an effective basis of tax levies and bond issues, but in all the preceding budget-making steps. It is to the planning commission that the administrative departments send their bond budget requirements and their recommendations as to the public improvements program. While this one instance does not indicate that other States and cities will go so far as New York City has, there can be no doubt that the existing trend toward including participation of the planning board in capital budget and public improvements program-making will tend to be stimulated.

HOUSING

The discussion so far has related to general planning legislation, including the typical subjects of master plan, zoning, subdivision regulation and mapped streets; but express provisions in other types of statutes to the effect that designated matters shall be referred to the planning agency or that the planning agency shall be represented should, to the extent of such express requirements, be considered as a part of the body of planning legislation. We have not attempted, of course, to go through the haystacks of all the statutes of these States for the discovering of the few needles of this kind which may be hidden there; but we have examined the recent housing statutes, enacted by thirty of the States, which authorize the creation of housing authorities and the construction of housing by these authorities or by the local governments. The United States Housing Authority Act contains no provision for submission of any project to a planning commission; but in practice the Federal Housing Authority does consult with the planning agencies.

The Ohio and Kentucky statutes require submission to the planning commission of all streets, parks and other public spaces in the project. Twenty-four of the statutes state that the housing projects shall be subject to the planning and zoning laws. The extent to which this will in any State compel submission of the location of housing projects to the planning commission will depend on the provisions of the planning laws of the State, including the municipal charters. Most of these state housing laws state that the housing authority should coöperate with the planning boards or should take any city or community plan into account. Massachusetts tells the housing authority to encourage the creation of planning boards! In regard to housing, therefore, the trend is to place in housing statutes sufficient to insure the participation of the planning agencies in the city or community planning aspect of the projects where the housing authority is keen for such participation or the planning board asserts itself.

ROADSIDE CONTROL

The regulation of the uses of highway frontages is a matter of current interest, though as yet the statutes are few in number. As the roadside is a part of the city or the county or the region, it is necessarily included

within the territorial units under general city, county and regional planning and zoning legislation, and, when so treated—that is, when the city or the county or the region is made the unit of the planning or the zoning, with a resulting allocation of land uses in the roadside strip, such as the regulation of advertising boards in residential districts—this regulation does not differ in basic concept or technique from the zoning of any other part of the city, county or region. The typical comprehensive county planning and zoning statutes of the type we have mentioned furnish ample legislative authority for the planning and regulation of the highway strip through planning commissioners and local governmental authorities if and when those who desire such planning and regulation are willing to apply planning concepts and methods to this subject, as demonstrated by California, which obtains the desired results along the highways by using the powers and methods set forth in its county planning laws.

Where, however, a special statute deals with the roadside regulation, the legislation is planning legislation, with the moral, intellectual and conceptual justifications of the regulations derived from planning, only when the planning of those regulations is reposed in a planning agency and that planning agency operates in accordance with comprehensive planning principles.

For instance, the Indiana legislature adopted in 1937 a resolution calling upon the Indiana State Planning Board to make the necessary surveys and formulate the necessary maps for the laying down of future lines of the major highways and the regulation of the uses along these highways, thus recognizing the problem as a problem within the province of a master planning agency and implying that the work will be done through planning techniques. There are, however, statutes which repose this task in highway departments, and though it is conceivable that the highway department will ask the planning agency to do the planning, such statutes do not treat the roadside "zoning" as a planning problem in our sense of the word.

The general state, county, regional and municipal planning statutes of the type we have cited so often will probably be found sufficiently comprehensive and elastic to authorize and make possible, so far as mere statutes can make results possible, the planning, including zoning, of other types of special districts or areas.

National Planning*

COMMITTEE

FREDERIC A. DELANO, Chairman, *Vice-Chairman, National Resources Committee.*
HENRY MATSON WAITE, *Consultant, National Resources Committee.*
ABEL WOLMAN, *Chairman, Maryland State Planning Commission.*

REPORTER

CHARLES W. ELIOT 2D, *Executive Officer, National Resources Committee.*

PROPOSITION I

A Planning Agency is Needed: There should be an advisory national planning agency, appointed by the President and reporting to the President and the Congress, on long-range plans, emerging problems, and, in general, serving as a "General Staff" to the Government for peace-time problems in a manner similar to the service of the General Staff of the War Department in relation to war emergencies.

PROPOSITION II

The Organization of a National Planning Agency: For the effective work of the proposed national planning agency, it is desirable that it should be composed of not more than five persons who have a national reputation and in whom the President has confidence. They should serve either without salary or on a per diem basis.

A full-time staff is essential to continuity of the work and to carry on necessary coördinating and clearing house activities with the many federal agencies concerned in all major problems on which the permanent planning agency will be expected to act.

In our judgment the permanent organization of the planning agency should be kept small with limited funds for overhead expenses. For special studies and coöperative investigations with federal agencies, state planning boards, and other groups, special additional funds or grants-in-aid should be available to it from time to time.

PROPOSITION III

Decentralization: Participation by large numbers of citizens in planning activity is essential to the success of planning under the democratic organization of our society. It should therefore be the policy of any national planning agency to decentralize activities to the fullest extent practicable. Under our Federal system this means that the planning organization should work through state planning boards and other state agencies for contacts with state governments and through such boards to local, town, city and county planning organizations.

*Report of the Committee as amended. See discussion of amendments and deletions which follows.

We confirm the recommendations of the National Resources Committee for the encouragement of voluntary regional and interstate planning work through the establishment of centers of coöperation, and through the organization, on a flexible basis, of regional planning committees served by appropriate field offices of the permanent planning agency.

We further suggest the early formation of a council or panel of consultants so as to provide to the central office of the national planning agency the services of technically qualified advisers and frequent and easy access to informed public opinion throughout the country.

PROPOSITION IV

National Assets: We welcome the activities of the National Resources Committee and urge the coöperation of local, state and regional planning agencies in studies of (a) *land* planning, (b) *water* planning, (c) *energy*, and (d) *public works*.

PROPOSITION V

National Production and Income: Growing realization of the need of producing and thus having more to divide, particularly to care for the one-third of the population which is "ill-housed, ill-fed and ill-clothed," emphasizes the value of nation-wide analysis of how we produce, distribute and consume. In our opinion, it is the business of the proposed national planning agency to consider these needs in relation to its other work.

PROPOSITION VI

National Welfare: The studies by many related groups of national health, welfare, education, recreation, etc., could in our opinion, well be coördinated with related studies under III, IV and V above through planning agencies at all levels of government.

DISCUSSION

Mr. Eliot: I want to refer very briefly to what might be called, perhaps, a partial endorsement of the third proposition in our committee report. It comes rather appropriately from someone who is in a position to speak concerning federal policy on decentralization. I refer to the President of the United States.

The President has sent a letter to Mr. Frederic A. Delano to be read at this session of the conference. It is as follows:

Dear Mr. Delano: Will you please convey my greetings to those attending the National Conference on Planning being held in Minneapolis on June 20 to 22?

It is encouraging to know that more people every year see the need for looking ahead, for planning the development of towns, cities, counties, states, regions and the nation.

The report on the future of state planning submitted to me by the National

Resources Committee marks another step forward in the planning movement for the wise conservation and development of all our resources. Under our democratic procedures, we can make sure progress through participation in planning by citizens at all levels of government.

The state planning boards now successfully at work in almost every state of the Union have a great opportunity to secure the interest and participation of all American citizens in shaping the future of their states and of these United States. (Signed) FRANKLIN DELANO ROOSEVELT.

MR. GEORGE F. YANTIS: I should like to use Proposition VI to make somewhat the same preachment that I have been imposing on all who would listen throughout the day.

I, personally, and, I am sure, all of us in the Northwest region interested in planning, accede to the proposition stated. We recognize the necessity of dealing wisely by virtue of proper planning and consideration of our assets.

We are convinced that planning should run through all units of government. We do not believe that planning should be ordered from the top. We do believe that it should be stimulated, inspired and given directional point. We are satisfied of this, however, that the strength of the planning movement will not be developed throughout the nation if the planning all be done at Washington.

Our people need the education and development that come from participation, and Washington needs the help and strength that come from the men and women throughout the country. However, we have a particular concern in the Northwest. That is, that planning become effective as fast as possible. We are not interested in planning solely to provide reports.

We have attempted in the Pacific Northwest to provide a possible means to help bring planning into the consciousness of our people, to make it recognized and utilized by those who have the responsibility for legislation and for administration. We think effective development can come only if people are prepared for government and prepared for planning.

Our problem is to get people to look at things—the use of resources, conservation of resources, developments of all sorts—to look at the problems which heretofore they have considered only from the personal rather than from the public standpoint.

Now to do that we have tried, and have succeeded at least partially, to create the vehicle which we hope may be useful. We have organized for the Northwest region an organization consisting of representatives of the groups interested in planning in the far northwestern states and men and women chosen from the field of education.

We will attempt through this agency to provide a clearing house for interchange of information and services between those in the four States engaged in planning, education, and public administration. We feel that it will be necessary to carry on a long and sustained effort, intelli-

gently directed, reasonably to accomplish our job. We do not feel that great progress will be made merely by talking planning as a generality. We expect to assist, if possible, in training public servants.

To provide an organization is comparatively simple. Our problems are the problems incident to all important operations; to find the character and the industry, and the intelligence in men and women, and the sustained effort necessary to provide the contribution which we believe may be made through this agency. We wish, if possible, to find a way to help prepare people for popular government and to make planning become a recognized and important part of the life and thought of the people of the Northwest.

Mr. A. P. Greensfelder: I would suggest in Proposition IV a little more brevity by cutting out the particulars. It seems to me a rather difficult thing to state particulars for a nation. Let each planning agency determine what the particulars are in their respective areas. If we are not to cut them out, I think they should be sufficiently modified so that they will not be controversial in the minds of people who aren't familiar with the objectives of planning. (Proposition amended.)

Mr. Alfred Bettman: I have a feeling that one of the jolliest ways to spend an evening is not upon a non-controversial report and, therefore, I am looking for something to controvert. There is a special item in here that rather struck me. That is, that members of the national planning body should be in the confidence of the President. It doesn't say the President shall have their confidence, but that they should be in his confidence, which has a somewhat questionable connotation to me. (Proposition amended.)

Mr. Eliot: I might explain one point that the Committee may have had in mind when it used the phrase "in the confidence of the President." If the planning board is to be of any use to the President, the President must have confidence in it and it must have some ready access to him.

Mr. Harold S. Buttenheim: I have been much interested in Proposition VI and its reference to national health, welfare, etc.

It seems to me that the planning movement has not taken as much advantage as might be desirable of the existence of a very considerable number of organizations in this country which are not planning organizations, but which have, or ought to have, a very definite interest in planning, and whose coöperation could be secured with the proposed permanent national planning body. While I have been sitting here, I have jotted down a few names of the sort of organization I have in mind: The American Public Health Association, the National Recreation Association, the National Safety Council, the National Conference of Social Work, the National Municipal League, the American Society of Civil Engineers. There are quite a number of other technical organizations in the various public works field, such as the American Water Works Association, the National Fire Protection Association, etc.

And there are several national organizations in the public works field that have their headquarters in Chicago: the American Municipal Association, the International City Managers' Association, the American Public Works Association, etc.

I wonder if the Committee has considered the desirability of inviting these organizations to endorse such a measure. If it could be discussed at the coming conventions of these organizations, I think some very desirable support for the proposal would result.

MR. RUSSELL V. BLACK: I notice in Proposition II that among the various purposes for which funds are suggested to be provided, there is no mention of any possible grants made to the state planning boards. This has been a principle which seems to apply in other fields of government very successfully.

I believe that a great deal of benefit might be derived by some very well-formulated plan of grants-in-aid to state planning. And I should like to see that at least mentioned in the possible uses of funds. (Proposition amended.)

MR. DONALD C. BLAISDELL: I am rather surprised to find that we all assume that we know what we are planning. With all of our physical planning I wonder if we have yet scratched the surface of the data which we need if we are going to think ahead intelligently, which I assume is what we mean by planning.

It seems to me that the steps which have been taken in the appointment of national commissions, one of which resulted in the passage of the Social Security Act, are certainly a part of the job that we have to do; that the physical planning which we undertake in the lay-out of cities rests on such basic ideas as the future of the population.

There will be forthcoming shortly the first results on a national scale of the survey which was made in 1935 of the way in which we use our incomes. These data, based on enumerations and interviews with over 300,000 people, will give us another scrap of information with which we can lay our plans for the future.

However, we come into an even more active field. There are population movements which take place relatively slowly, such as the growth of cities, but there are economic movements which take place even more quickly. Since a year ago we have witnessed probably the sharpest drop in economic activity ever known in this country. I wonder if any national planning organization, or any body of government officials, or private individuals could plan for that happening. I am one of those who would dare to think that we can; that this calls for perhaps a slightly different idea of planning than some of us have tried to follow in the past; that we must not have one plan but that we must have two plans, maybe three or more; that we must have alternate plans with which to meet different types of situations which may arise.

I suggest also in connection with our physical planning that possibly

we ought not to draw the regional plan for New York and environs. Perhaps we ought to draw possible alternative plans. If we interpret the trend of economic forces correctly, possibly one plan might do. I doubt it; we need alternatives.

MR. ELIOT: The idea of alternate plans is certainly a novel contribution to these conferences on planning. I hope the challenge Mr. Blaisdell has laid down may be taken up by some of those who previously have advocated a master plan.

COL. H. M. WAITE: There is a most decided need in this country for alternate plans, not only, as so ably said by the previous speaker, on our welfare and economic side, but in public works planning as well. It is comparatively easy to build up a federal public works program with all federal departments thinking in terms of year-to-year budget expenditures. It is exceedingly difficult, however, to plan non-federal public works programs, keeping people interested in a plan that will be alternative to meet different conditions.

How can you keep a community, a State, and forty-eight States, with the counties and the numerous cities in each of those States, interested in the possibilities of a budget expenditure that will be alternative to meet the economic condition of the country, which may vary from State to State and from coast to coast.

The federal government today is figuring on a six-year federal public works program. It will be based on two alternatives. One of these expenditure budgets for six years will be on the theory of prosperity and a balanced budget; the other will be for possible expenditure in case of economic necessity, from which one can draw for projects that are in the balanced budget or low curve.

I think one of the grave problems before planners is the adoption of a plan that may be interpreted in the light of financial crisis or of prosperity.

That leads me to this thought about non-federal planning. A planning board is a board of review. It has no administrative function. It sets up an ideal plan, we will say, of expenditure. It thinks in terms of things that must be done to fit the ideal of development of a particular community, whether it be city, county, or State. At the same time the execution and expenditure is ordered by the administrative agency. Therefore, in setting up a plan for non-federal work, it must be considered from the idealistic-plan view and, at the same time, the practicable possibility for the execution and construction of the plan or parts of the plan that will meet the economic conditions of the country or of the local community.

Aren't the planners overlooking that idea? Are they really tying together the idea of a plan and the practicability of the execution of that plan under various economic stresses?

MR. E. H. WIECKING: A great deal of progress has been made in the

field of rural land-use planning. That is just one segment under your Proposition IV. It is the only one that I have any right to speak on in any manner. The progress has been in large part due, I think, to the emphasis which was originally given to it through the National Resources Committee, then the National Resources Board. I think you are all familiar with the series of rural land-use planning reports that we issued under the auspices of the National Resources Committee some years ago. That work served as a basis and gave impetus to a movement in the rural land-use planning field. The temporary organization which was thus set up through the National Resources Committee is now a permanent, at least we hope permanent, group of men in the Department of Agriculture working closely with the various state agencies.

It seems from a remark made by Mr. Yantis earlier in the evening that one of the great needs now is to get planning into the thinking of the citizenry. In the agricultural field that is being attempted with very interesting results. There are now in operation about twenty-four hundred voluntary farmer-citizen planning committees, entirely informal, throughout the United States. Some nine hundred of them have turned in land-use classifications for their respective counties, which, in our judgment, is the first technical step in working out a program for their communities.

I think that is one of the very necessary steps in the planning process, because not until the interest of these people is enlisted will the proper headway be made. Not until they feel that plans are their plans will anything ever be done about them. And not until they themselves realize the necessity for remedial legislation, will such legislation be passed.

Mr. Black: I suppose I have what may seem to be a very impracticable suggestion. I have dared to hope that the National Resources Committee might sometime broaden its land-planning studies to include what I would call a future land-use study for the entire United States, not one limited to the use of rural land, but to all land uses.

I have in mind the delineation of the large land areas of the State as to their future place in the national economy. That is, the delineation of those areas which are to serve primarily the industrial areas of the nation, the areas in which the largest future is agricultural, recreational, and so forth.

We should do it on a large scale, appropriate to a national undertaking—a projection of present uses into the future so far as we can foresee it, using that pattern of future land use as one of the primary bases for the development of our plans.

Proposition IV (a), Land Planning, starts out with a survey of public land ownership. That seems to me to be the least part of the kind of future land-use study I am thinking about. We are concerned with the future of land used by all agencies, public and private, and it is my

hope in the States in which I am working, that a first step to what I call a master plan will be this future land-use study.

But the individual States are helpless in many of these things. What the future land uses in individual States are will depend upon the broad national economy and land use, and it seems to me that it is up to the National Resources Committee to provide the leadership to the States in future land-use planning.

MR. BETTMAN: I am a little puzzled about Proposition V, what its intention is, what its import is. It seems to me to refer to the thing we call economic planning. It hints at an agency which has in a purely advisory capacity the function of doing economic planning. It does not make it perfectly plain that the agency is to be the same agency as that which is being talked of in the previous four propositions and, if so, it puts this economic planning function in a most mild and negative fashion.

I don't wish to attempt to assert a position upon this question, but I do believe that it will not do to leave Proposition V in this somewhat nebulous and negative state. If it be the intention to include economic planning within the jurisdiction of the planning agency, which has been talked of in the other propositions, I believe that it ought to say so.

MR. ELIOT: I am not quite sure, but I hope I am interpreting Mr. Bettman correctly. He moves an amendment to the last sentence to read something like this: "In our opinion, it is the business of the proposed national planning agency to consider these needs in relation to its other work."

MR. BETTMAN: That is right.

MR. WILLIAM STANLEY PARKER: I second the proposed amendment.

MR. ELIOT: My interpretation, I understand, is adopted by Mr. Bettman and seconded by Mr. Parker. It is before you for discussion. Is there any further discussion of the amendment?

There was no further discussion of the amendment. Question was called, and the amendment was carried.

State Planning

COMMITTEE

MORTON L. WALLERSTEIN, Chairman, *Chairman of the Virginia State Planning Board.*

MORRIS B. LAMBIE, *Graduate School of Public Administration, Harvard University.*

ROBERT H. RANDALL, *Consultant, State and Regional Planning, National Resources Committee.*

REPORTER

HAROLD F. GOSNELL, *Department of Political Science, University of Chicago.*

DISCUSSION LEADERS

ELISABETH M. HERLIHY, *Chairman, Massachusetts State Planning Board.*

V. O. KEY, *National Resources Committee.*

ROBERT D. LUSK, *Vice-Chairman, South Dakota State Planning Board.*

RICHARD E. SCAMMON, *Chairman, Minnesota State Planning Board.*

THE Committee, recognizing the magnitude of the subject and simply with the idea of expressing certain skeleton opinions along the outline of the discussion, in order to aid in its stimulation, reports as follows:

Relationship with Other State Departments: The relationship of a state planning board as to other state departments may roughly be referred to as the relationship with the governor, with the executive departments serving under the governor, and with the legislature. It is apparent that the state planning board must be non-partisan, non-political and non-propaganda. It should serve as a general staff to the governor to place before him pertinent facts concerning the general welfare of the State and to furnish to him facts and conclusions upon request. With the state departments it should likewise serve as a general planning staff for the same purposes, care being always exercised, in both cases, to place the planning board in its proper position as a planning agency and not as an administrative agency, serving only in an advisory capacity and not being charged with or endeavoring to execute its suggested plans. With regard to the legislative department, including a legislative council, if any, as well as legislative commissions and committees, it should serve merely as an advisory agency when requested to act and not seek to impose its views on any legislative body, or part thereof, seeking at all times to present factual material and proper conclusions to be drawn therefrom, leaving to legislative representatives their own respective duties as to policy making.

Stimulation of Local Planning: As no state planning board can properly exercise its planning functions without local planning commissions, the duty of stimulating both the organization and effectiveness of local boards, municipal, county and regional, is at once apparent. In this

stimulation it is believed that far greater use should be made of the state-wide organization of municipalities and of counties, as these organizations are probably much more apt to secure attentive hearings from the local units than is possible with a state planning board. Your Committee strongly recommends the setting up in each State, if possible, of a well-informed planning consultant to work with the state planning board, as well as the municipal and county organizations, in the actual promotion and technique concerning the organizations of the local boards. In this connection, publicity, both in the newspapers and by the issuance of circulars and magazines through the state planning board, is advisable, although care should be taken to see that this is not overdone.

Integration of National Planning: That there is serious need in those problems of nation-wide import, typical examples of which are water resources and land uses, that a national agency, in coöperation with the state planning board, is essential, needs not be labored here. In addition to this, many regional problems arise among the various States in which a national agency can be helpful. As to what this relationship may finally be is, in the opinion of your Committee, not possible of decision at this time. Questions which might be considered in a discussion of this report are as to whether there should be a financial grant-in-aid, as to whether consultants should be furnished as has been done, as to what criterion should be as between the better staffed planning boards and the weaker ones. These are questions which should be thoroughly considered.

Public Relations and Exposition of the Planning Program: Because state planning is comparatively new in the governmental set-up, your Committee recognizes that its future is measured not only by its accomplishments but by proper public relations through official and unofficial contacts, through colleges and schools, through the press, and various other media of disseminating information to the public. Here, again, certain principles must be closely adhered to. One is that the publicity may be overdone to an extent where the general public and those sought to be reached receive so many publications and press releases concerning planning that they fail to read them. Another is that the planning stories, wherever possible, should have real news value. Another is that planning stories should frequently be released by state departments and others concerned, rather than through the state planning board itself. As the future of state planning will unquestionably be determined by the younger people, it would seem advisable that increasing attention be given to the development of the ideas of the state planning board in the schools and colleges. In the opinion of your Committee, no opportunity should be neglected before public meetings to give pertinent facts and conclusions established by your state planning board. Wherever possible, these should be localized and of particular interest to the group before whom they are presented.

Education for Planning in the United States

COMMITTEE

CARL FEISS, Chairman, *Planning and Housing Division, School of Architecture, Columbia University.*

FREDERICK J. ADAMS, *School of Architecture, Massachusetts Institute of Technology.*

DONALD C. BLAISDELL, *Assistant to the Under-Secretary, United States Department of Agriculture.*

HENRY V. HUBBARD, *Chairman, Department of Regional Planning, Harvard University.*

REPORTER

WALTER CURT BEHRENDT, *Technical Director, Buffalo City Planning Association, Inc.*

DISCUSSION LEADERS

HAROLD W. LAUTNER, *Executive Secretary, American City Planning Institute.*

KARL B. LOHMANN, *Department of Landscape Architecture, University of Illinois.*

S. B. ZISMAN, *Agricultural and Mechanical College of Texas.*

STATUS OF PLANNING INSTRUCTION IN INSTITUTIONS OF HIGHER EDUCATION

CARL FEISS

THE Committee on Instruction and Research of the National Association of Housing Officials assigned to me in the spring of 1937 the job of determining the status of housing instruction in institutions of higher education in this country. This survey was conducted only in fields of higher education, although some preliminary investigation was conducted in grade and high-school planning education with the assistance of the curricula research laboratory of Teachers' College, Columbia University. None of the investigations so far was limited to the housing field because it was known that in many places both planning and housing were taught either simultaneously or in a sequence of lectures. Therefore, in all forms, form letters, and other methods of contact, questions on planning were included, and in the replies the planning material was separated from the housing by a careful analysis and breakdown into tables.

A total of 365 universities, state colleges, teachers' colleges, state normal schools and architectural schools were contacted. The replies varied considerably in character. In some cases they were of little value, but in a great many instances they revealed the fact stated above, that planning and housing education are subjects of great interest. There is one very pertinent fact resulting from the study, and that is that there are no two institutions teaching planning or housing in the same way.

Special Departments or Schools	Question-naires sent	Replies received to date	Teaching Planning, or Housing, or both
Agriculture	36	36	25
Architecture	34	34	33
Arts and Sciences	38	15	9
Education	54	10	2
Engineering	57	21	17
General (Just Head contacted)	98	93	73
Graduate Studies	27	5	1
Home Economics	29	17	16
Social Service	26	16	15
Teachers Colleges and Normal Schools	171	23	3
	570	270	194

CHARACTER AND DISTRIBUTION OF REPLIES

It is impossible at the present time to draw any final conclusions as to curricula based on the material received, because of the great variety of forms in which it was submitted, and because of our lack of direct contact with individuals. The variety of forms may be due partly to the generality of the form letter itself, but the evidently rapidly changing curriculum in the schools is probably also a factor. There is still another reason for the difficulty, and that is that there are many courses which are on the border line, which may deal with some factor of planning or housing, or a subject which has an influence on these fields but which is not entirely concerned with them. In some cases the teachers themselves are not aware of the fact that the courses they are teaching are really planning or housing. Others have confused housing with dormitories and shelter for poultry and livestock, and city planning with "decorative horticulture."

Obviously, a sample method can indicate only a general trend, and many important schools may have been lost or uncontacted. On top of this it is also obvious that a letter received from an institution cannot be judged at its face value. Every head of every department is anxious that his teaching appear to be the best, and all accounts of courses had to be taken with a pinch of salt. Because no personal contacts were made with individual teachers, it was impossible to know how well the courses were being taught, or even the name of the professor, the subjects covered, or the hours and the requirements of the course. These are some of the handicaps which we must accept, and our judgment and analysis of the material received to date must take them into account. Subtracting the "no's" and subtracting also those elements which have a tendency to prevent the drafting of final conclusions on questions of this sort, we are still faced with an impressive array of facts. Housing and planning have unquestionably become important items in curricula, and the Committee on Instruction and Research, and planning and housing organizations interested in education have a big job ahead of them in assisting our educational institutions in formulating courses of real merit and value

which may guide the consuming public in the improvement of its own living conditions throughout the country.

In order to facilitate the interpretation of the material, a spot map was prepared showing the geographical relationships of institutions teaching planning or housing or both. The results indicated a concentration along the Atlantic seaboard, a wide-spread distribution in rural sections of the South and Midwest, and almost no courses being given in the Southwest. Naturally, the concentration of interest falls in the areas in which the planning and housing problems are the most serious, such as the most densely populated areas in New England and the Middle Atlantic states, in the Great Lakes region, and in the rural slum districts of the deep South. There is a distinct vacuum in the western parts of the States of Kentucky and Tennessee, and the northern part of the State of Mississippi, a belt in which extremely bad housing conditions obtain. The sample did not take in, unfortunately, the smaller educational institutions in southern Indiana and Illinois, in northern Missouri and southern Minnesota. However, for the purpose of this preliminary report, enough institutions were located in such widely varying geographical and climatic areas that it is safe to assume that there are few sections in the country in which planning has not become a regular part of the curriculum of most important educational institutions. It is also evident that recommendations will be toward the decentralization rather than the centralization of planning education. Local problems will have to be met by those trained in special areas, familiar with local climate, social and economic conditions and local labor and building materials.

Unfortunately, it has not been possible, because of lack of time and funds, to analyze the planning information in as detailed a way as the housing. However, certain facts are outstanding. In the first place all but one of the accredited architectural schools claim to be teaching planning in some form or another. Only a few of them are giving complete courses and the rest give occasional design problems and lectures.

The late John Nolen issued in 1927 a list of 29 colleges and technical schools giving lectures or courses in city planning. (An earlier survey made by James Sturgis Pray of Harvard in 1921 was not available, so that it was difficult to establish a trend.) All except three of the institutions contacted by John Nolen were still teaching planning in some form or another when this last survey was made, and in technical institutions, including architecture, civil engineering, and agricultural engineering, some twenty more interested institutions were uncovered.

Several pertinent questions on technical planning education have not been answered. I pose these problems not because they are controversial, but simply because sooner or later it must be determined which departments in universities or technical schools are best fitted to teach planning to technicians. For instance, Cornell, Harvard, and the University of Illinois teach planning in departments connected with or supplementary

to the departments of landscape architecture. At M.I.T. and Columbia planning courses are taught in departments of the school of architecture, M.I.T. emphasizing the large-scale planning aspects of the field, and Columbia urban re-planning and housing. The University of Nebraska and Kansas State College teach planning in their schools of engineering. One fact to be noted is that the most impressive results of the survey were not the uncovering of any significant new material in the better-known urban schools, but of a vast interest in rural agricultural schools both in the South and the Middle West. In these institutions, planning instruction becomes part of the agricultural engineering colleges; these being influenced by the large-scale conservation policies of Federal and state governments, are giving new courses in regional planning, including reclamation and conservation studies, highway design, coöperative producing and marketing, and rural electrification.

OTHER SURVEYS ON PLANNING EDUCATION

Let us return to aspects of technical education not covered by the reports of the Committee on Education of the American City Planning Institute: Since planning is being taught in rural areas in schools of agricultural engineering, it may be well for the Institute to recognize the possible importance of the development of trained technicians in these schools. Many teach not only the more obvious planning courses, but also studies in sociology, home economics, and political science.

There seems to be confusion in all institutions, whether urban or rural, as to what planning education consists of. Perhaps this confusion exists because of the different orientation of the technical schools teaching the subjects. One would not expect a landscape department to give courses in slum clearance and re-housing problems nor an urban architectural school to deal with large-scale planning of rural areas. Obviously, specialization in varying locations is necessary. It is perfectly true that there is no hard-and-fast dividing line between urban, suburban, rural and regional planning problems, and the technician interested in any of these problems should be cognizant of the importance of the others. However, this is an age of definitions, and planning is a "portmanteau" word of the worst sort which holds too many ideas. The limits of its meaning are fuzzy. The ACPI could be of real use in the clarification of the terminology used in various schools, so that ultimately we may know just what is being taught in them.

Another survey of planning education has been completed by the National Economic and Social Planning Association. This survey was discovered after it was too late to prevent a duplication of material, but the NAHO mailing list was mailed to the NESPA in order that returns might be checked.

The exact number of planning courses and their character is only of academic importance. One month from the time of writing the figures

may be out of date. The curricula are changing constantly. Sooner or later it is going to be necessary to set up a committee to analyze schools in different localities. No two courses seem to be given in the same way, and the permutations and combinations appear to be infinite.

Planning instruction is spreading like wild fire in educational institutions throughout the country. There is no need to check the spread, but there is need to direct it if it is to be of any use in clearing the tangled undergrowth which is our present environment. Education properly organized and directed can be of great service to the Nation. Planning education seems to lack both organization and direction and badly needs the stabilizing influence of one central organization specializing in its problems.

PLANNING EDUCATION FOR PUPILS IN GRADE AND HIGH SCHOOLS

FREDERICK J. ADAMS

IN RECENT years an increasing emphasis has been placed on the education of the average citizen in the importance of physical planning, whether city, state, or regional in scope. This is a natural development from increased recognition of the value of comprehensive planning by local and state governments; for if the advance planning of man's physical environment is to be successful in a democracy, the support of all classes of the people is essential, not only if sufficient funds are to be provided by legislative bodies at all levels of government, but also if carefully studied plans are to be acted upon.

In order to ensure intelligent public action in the future it is not sufficient to educate adults. The citizens of the future should be informed of the social and economic advantages of comprehensive planning for neighborhoods, cities and regions. Such information can form part of the curriculum in civics. It is worth drawing attention to the fact that the average high school graduate reaches voting age within three or four years after he leaves school.

A number of attempts have been made, some of them very successful, to inform students in elementary and secondary schools of the advantages to their community to be gained by comprehensive planning. The best-known examples, such as the efforts of Charles H. Wacker in Chicago, Illinois, and George E. Kessler in Dallas, Texas, generally resulted from attempts to gain public support for specific plans, and in the case of Chicago such a program proved particularly successful.

The need today is for a satisfactory method of providing the younger generation with some appreciation of comprehensive planning as an idea or point of view. At a conference on planning education held in Washington, D. C., on March 24, 1938, under the sponsorship of the American Planning and Civic Association, attention was called to this difficulty,

and one of the methods proposed for overcoming it was to bring to the attention of the public some concrete examples of good and bad planning in their locality.

Actual organizations exist for the development of public interest in planning, notably the American Planning and Civic Association and the Bureau of Community Planning developed at the University of Illinois under the chairmanship of Dean Rexford Newcomb of the School of Architecture. Another organization whose purpose is the same, although it is confining its attention to the junior and senior high-school pupil, is the New England Town Planning Association of Boston, Massachusetts, of which the present writer is secretary. Most of the activity of the Association has been in the development of interest on the part of school principals and civics teachers in the use of planning material in their courses on local government and similar subjects, and the sponsoring of competitions.

The criticism has been made that such contests tend to give to those who are successful in receiving awards the impression that they are qualified to consider themselves professional planners; and, further, that the inclusion of projects of this type in the elementary or secondary school program implies that physical planning does not require a high degree of technical ability. It does not seem to the present writer that this is any more valid than that the teaching of painting, sculpture, or music in such schools reflects on the professional fields of the artist or musician.

If use is made of methods of procedure similar to those followed by technicians, it is because the "project method" is finding increasing support among educators, and the preparation of plans or maps is an ideal medium for interesting young people in planning problems through active participation in a project which involves a study of the future possibilities of their community or neighborhood.

If we agree on the desirability of the inclusion of such material in the subject matter of civics courses in our elementary and secondary schools, the question arises as to the form in which the material should be presented. This must vary with the locality of the school—and even with the individual teacher; but some experience already accumulated by the New England Town Planning Association indicates the desirability of utilizing existing courses in civics, government, or art for such instruction rather than attempting to inject new courses into what are already overcrowded curricula. The school teachers themselves are in a much better position than the professional planner to work out ways and means of treating the subject matter. What they ask is help in the selection and correlation of the material and apprisal of recent developments.

Teachers in elementary and high schools need a textbook which presents the responsibility of each citizen in securing the proper future development of his community, not a detailed procedure for a planning project, for there might be a tendency to follow it literally without

recognizing the extent to which local conditions vary such procedure. At the same time there would be an obvious advantage in having at the disposal of such teachers a book which brought out the significant contributions which have been made in the field of community planning and was well illustrated with photographs and plans of actual examples.

Above all, planning education in the schools should not be simply informative but should be used to develop an attitude of mind on the part of the younger generation that "something can be done about it"; that the proper planning and control of our urban and rural areas is not impossible under a democratic form of government; and not only that as future citizens they have a responsibility in the matter but that it is to their personal interest to see that the communities of the future provide a satisfying environment.

It is obvious that the field being so large and past experience so limited, the objectives of such a program cannot be reached overnight. Most encouraging is the increasing recognition of the fact that such a program is essential if real progress be made in planning. There is every reason to believe that a new attitude of mind on the part of the public is already in the making.

TRAINING OF PROFESSIONAL STUDENTS IN UNIVERSITIES AND COLLEGES

CARL FEISS

Specialists in planning[1] education have been concentrating their attention on the training of technicians. While admittedly the training of technicians is still in an experimental stage and a standard methodology is still to be worked out, it would be foolish of those most interested in this form of instruction to ignore the training of professional students in our universities and colleges. These are students who in all likelihood will never touch a drawing board, who will never actually make a physical plan, and who may never understand the jargon of the technicians. However, in the near future they may be shaping our laws, our economic policies, our social outlook. Slowly but unquestionably these professional groups in our universities and colleges are becoming planning conscious; it is up to the technician to contact them as soon as possible that his point of view may be easily understood, and that ultimately these groups may be of assistance to him.

PRESENT PRACTICE

At present, in universities having technical schools where planning instruction is being given, there is very little interdepartmental coöperation. While the professional departments such as sociology, economics, and law are occasionally drawn on by technical planning departments

[1]Planning, i.e., physical planning, which may include urban, suburban, rural and regional planning, singly or in combination.

in universities for special lecturers, the technical teachers of planners are seldom asked to reciprocate.

The training of planning technicians has been carried on in architectural schools and schools of landscape architecture, engineering and agricultural engineering. There are not many complete courses being given, and the bias is almost invariably in the direction of the particular school in which the planning instruction is being given. Where such instruction occurs in universities there are much greater opportunities for interdepartmental coöperation, and the technical student has a chance to broaden his training. However, there is hardly a department in a university which does not have such high walls of red tape around it that the student and the instructor are discouraged. While the technical student may know what he wishes to get from the sociologist or lawyer, the very nature of the technical school may frighten the sociology or law student from attempting to enter planning courses even if he could. Besides, all educational trends seem to be directed toward a greater specialization, and few courses, whether technical or professional, are so designed that students from the outside may understand the work carried on within them. In almost all cases where technical students have been enrolled in sociology or economics they have found it difficult to keep up with the regular students; consequently, in most institutions giving courses in planning of a year's time or more, special lectures have been given in urban sociology, municipal finance, municipal government, and economics. The attitude of the professional department toward those lectures or courses seems usually to be that they are too elementary and too specialized for the regular professional student.

In universities where no technical planning courses are being given, professional training oddly enough seems simplified. Special lecturers are often called in for short periods, but research work and these are completed without benefit of expert. It is not unusual that a student of education should write a thesis on city planning[1] or that innumerable sociologists should include city planning chapters in all of their writings.

It is extremely interesting to notice the rapid spread of planning courses in midwestern and southern agricultural schools; in fact, it is obvious that the work of the Tennessee Valley Authority and that of the National Resources Committee has excited a growing demand for rural and regional planning studies. It would seem to be the rare agricultural school, whether state-financed or not, where some form of planning does not occur in the curriculum. The extension services of the U. S. Department of Agriculture and the state departments, as well as the educational activities of the National Resources Committee and various Federal farm agencies, have been particularly helpful. Large-scale planning has been and can be made as available to the rural student as to the urban one.

[1]For example, "Relationship of City Planning to School Plant Planning," by Russell Holey, Teachers' College, Columbia University, 1935.

However, despite the encouraging spread of interest in planning, there are still many institutions and departments in institutions which should be interested in the subject but are not. Changes in curricula move slowly in the older self-satisfied schools or in smaller and more timid ones. The gap is particularly noticeable in teachers' colleges and normal schools, and one is led to wonder who has been giving the teachers of professional students the little planning they know.

The teaching of professionals is a complicated problem. For instance, the law student studying real estate law may get his planning education from a real estate man so much interested in the sale of property that to him any form of planning legislation approaches socialism or communism. Or he may get his bias from a technician who is so much interested in proper planning that he ignores the rights of the property owner. Another factor is that the professional student may consider himself an expert rather than a specialist unless he is given the kind of course which enables him to understand and appreciate the work of the technician or professional in other allied fields. He may come to the point where he considers his own field the only one properly fitted to handle planning. The same, of course, is true of the technician who often believes that he can be a lawyer, sociologist, political scientist, economist, and publicity expert all in one. It is perfectly true that in small communities and in isolated areas where assistance in these various fields is difficult to obtain, the technician has to be a "jack of all trades." However, as the success of his job is always predicated on coöperation and coördination, he will have to learn to understand the professional's point of view and how to use the professional to the best advantage of the community.

FUTURE PRACTICE

While professional planning is complicated, there is no reason why it cannot be successful. There are five professional departments in whose curricula planning education should be inserted: sociology, economics and home economics, law, political science and education.

It is recommended that where technical planning courses are given in universities or colleges the heads of these courses contact the deans of these five departments and discuss with them the need for interdepartmental coöperation.

Any one of the three organizations participating in this conference is in a position to sponsor conferences and conventions in academic circles. Several noteworthy planning meetings have been held in the last few years under the auspices of both technical and professional schools, and usually with one of these three agencies in the background. However, the interest aroused by such conferences is only temporary unless regular courses are set up.

The planning technician needs the assistance of professionals who have specialized in particular fields allied to planning. It is up to him

to attempt to get coöperation from professional schools in order to get the assistance he is going to need from their graduates. It is up to him to see that their training is suitable to his needs. No one else can do this end of the job properly.

ADULT EDUCATION

CARL FEISS

The planning technician is compelled to be a publicity expert. Half of his time is taken with selling planning[1] to the public. His training is expensive and long. The technique of planning is constantly changing, and part of the technician's natural job is to be on the qui vive for new developments. Because planning is a relatively new field, because the lay public confuses ordered procedure with regimentation, many of the planner's precious crowded moments are wasted in explaining the simplest and most obvious ideas to the public.

To add to the troubles of the planner, not only the public but officials have to be sold on the idea of planning. Since public officials do not always have a professional or technical training, planning education for adults must become a significant part of any large-scale educational program. As Mr. Blaisdell brings out in his report on "Planning Education of Public Officials," it may be necessary to give special education to officials either to broaden or narrow their outlook. However, a basic program of adult education throughout the country, with emphasis on special regional problems, would simplify this training.

Obviously, the more support the technician gets from an intelligent public, the simpler will be his problems, and the faster the local planning program will proceed. Technical and professional planning organizations such as the three participating in this conference, while devoting their activities to adult education, have a very specialized public and a limited range of activity. This is not meant as a criticism, but it is suggested that some of the activities of at least one of them (perhaps the American Planning and Civic Association would be the most logical), be directed toward a nation-wide planning educational program.

Adult planning education falls into three divisions: (1) Prepared courses voluntarily attended (university extension courses, night schools, special lecture programs, radio, etc.); (2) voluntary purchase of literature from, or membership contact with, professional, technical, or government planning agencies; (3) unconscious absorption of planning knowledge from newspapers, periodicals, radio, motion pictures, etc.

Since these types of education are widespread and involve all kinds of localities, a national planning education committee made up of the three participating agencies may be necessary to insure a coördinated program.

[1]Planning, i.e., physical planning, which may include urban, suburban, rural and regional planning, singly or in combination.

Prepared Courses Voluntarily Attended: This type of adult education, while of value, is the most limited in its contacts with the public, and probably has least influence. In small communities in parts of the country where large-scale planning or reclamation projects are under way and local interest is high, special lectures, open fora and meetings of all kinds are usually well attended. In urban centers where special controversial problems exist, a series of night courses given in a local university or high school auditorium may receive much publicity and be successful in reaching large groups. However, in general, it is not to be expected that the average adult, man or woman, will attend a course on planning or housing problems. The audience usually attending such courses is made up predominantly of professional and technical workers interested in increasing their own ability.

There have been all types of agencies sponsoring such courses, not only technical planning departments in universities, but also professional departments such as those of sociology and political science. Women's organizations have been particularly active, such as the League of Women Voters working with parent-teacher associations. However, too little use has been made of parent-teacher associations by professional planning agencies in furthering this kind of activity. In some towns the local planning board has not only sponsored planning educational programs for children, but also illustrated lectures for adults.

Radio education is being tried, but whether successfully or not cannot yet be ascertained.

Most planners are anxious to have as part of their organization, public representation in the form of a citizens' advisory body, varying in size according to the needs of the technician and the community. This type of educational activity is ideally suited to the work of this advisory body.

Voluntary Purchase of Literature or Membership Contact with Planning Agencies. Special Books: There are three types of planning organizations distributing propaganda to the adult public: (1) governmental (Federal, state and local); (2) technical; (3) professional.

The Federal Government has been publishing a vast amount of important planning literature, a good deal of which may be obtained free of charge or at a nominal sum. Perhaps the best example of such publication is that of the National Resources Committee, which not only publishes its reports in full for the use of the technician, but from time to time digests these and publishes them in a simplified form for the use of the public. Such publications have a wide distribution in schools and colleges and among technicians. How much contact the public has with them is not known. In all likelihood, government-sponsored motion pictures on planning subjects have had wider influence.

The Department of Agriculture, the rural resettlement and conservation departments, the National Park Service, and other organizations in

the Department of the Interior and the Department of Commerce have been publishing a vast quantity of material. While these agencies have large mailing lists they must depend a great deal upon voluntary demands for the distribution of their publications.

State and local planning agencies are also constantly publishing reports, bulletins, and brochures. These are distributed usually to various departments in the state and municipal governments, and reach some of the schools and universities upon demand. However, the editions are limited in number and reach a relatively small audience. In the small town the local planning agency can help itself materially if it sees that its reports get to important citizens through a special mailing list.

Another form of planning literature which is obtainable through purchase or in libraries is books dealing with planning subjects written by private individuals, technicians, or professional workers, published by private printing houses. An example of the first which comes to mind immediately is Lewis Mumford's *The Culture of Cities.* The digest of this book in the magazine *Time* advertised the planning field to the lay public on a larger scale than has all the publicity and propaganda emanating from governmental, technical or professional planning agencies.

Unconscious Absorption of Planning Knowledge: The vast majority of people does not like to be told that it is being educated, preferring to think that it is picking up its knowledge under its own power. Planning covers such a wide variety of fields that information on it is constantly appearing in all kinds of publications and in various amusement fields, thus inadvertently reaching the public. Agencies which are often unconsciously assisting in adult planning education are the newspapers, periodicals, motion pictures and the radio.

Newspapers have been and can be the most potent influence on the public knowledge of planning. Not only have such syndicated writers as Mrs. Roosevelt and Westbrook Pegler devoted space, time and again, to various aspects of the subject, but the controversial planning problems are being constantly referred to in feature articles and editorials. The newspapers are articulate and usually interested. There is no better way to reach the public at large than through them.

Periodicals have recently come into prominence in wide-spread planning educational activities. The more expensive *Atlantic Monthly, Fortune,* etc., reach a limited public, and while they have published much interesting material on the subject, they are relatively unimportant in the larger educational field. However, the less expensive and more widely distributed magazines such as *Time* and the *Saturday Evening Post* often publish special articles on planning subjects. The new picture magazines, *Life* and *Look,* have been giving to planning considerable visual publicity of a most important kind. While this is often sensational, it reaches a public which otherwise would not be contacted, and these publications are worth watching as possible vehicles of assistance to

large-scale planning programs. They certainly cannot be ignored by planning organizations interested in public education, and strong pressure should be brought to bear upon them when necessary in furthering the proper kind of propaganda.

The radio in its present form is limited in its use to planners. Not many people will sit down and listen to a lecture on the subject unless the lecturer is particularly well known and the subject is extremely controversial. Television is already in limited use by planners in England, according to Sir Raymond Unwin, and with its development new opportunities of direct presentation of important planning material may become possible to a large public.

The motion-picture field appears to have unlimited possibilities in public education. Two of the most important and successful ventures in planning propaganda through the movie have been "The Plow That Broke the Plains," and "The River," done under the able direction of Pare Lorenz, and sponsored by the Resettlement Administration. From the planner's point of view, as well as the purely artistic one, they were an unqualified success and stand by themselves as masterpieces of presentation and planning propaganda. It is to be hoped that further experimentation on the part of planning agencies in the motion-picture field will develop more methods for the use of this popular form of public passive recreation.

SUMMARY

Certainly the training of the public to understand the need for the planning technician is as important as the training of the technician. It will take the combined efforts of all people interested in planning to prepare a program for public education and to see that it is carried out by being properly disseminated through some of, or all of, the many media mentioned.

PLANNING EDUCATION FOR PUBLIC OFFICIALS

DONALD C. BLAISDELL

In the first place, which public officials have we in mind? By the phrase do we refer to all public officials, Federal, state and local?

Second, is different educational treatment required for different categories of public officers? Superficially, this would seem to be the case. Even on closer examination it may be concluded that education for planning in the case of local and municipal officers requires one kind of materials and one outlook, whereas state and federal officials could be better inducted to planning by the use of other materials and another outlook. Although as a general rule local problems can be said to require local treatment, the integral nature of local and regional problems on the one hand and regional and national problems on the other suggests that the

line of distinction is shadowy. Hence, different treatment for various groups of officials may not be the wisest procedure.

In the third place there is this question: Is the type of planning education which is required for public officials different from the type required for others? Obviously, this question cannot be answered adequately in a sentence. As a general statement, most public officials are technically trained even though many of them occupy administrative positions. Does this mean that technical rather than non-technical material should bulk large in the educational program?

This raises the fourth question, the scope of the educational program. Do public officials, all of whom have finished their formal education, stand in need of planning education of a broad sort, of a narrow sort, or what? That is to say, should planning education for public officials aim at creating a narrow outlook and be confined to the related problems in an immediate area or should it be broad enough to include an area as large as a geographic or cultural region? Underlying the whole matter of planning education not only for public officials but also for others is the basic question: Is there a general problem of maladjustment between resources and population in urban areas comparable to the problem in non-urban areas? Recently, studies have pointed out in a very conclusive way the relationship between population, natural resources and the standard of living in such regions as the Great Plains, the lake states cut-over region, the Ozarks, and the southern Appalachians. This should make us very cautious in defining a narrow scope for planning education.

FURTHER BASIC CONSIDERATIONS

In addition, it should be recognized that the population as a whole has fairly well-defined notions about the potentialities of our national future. The future, it is thought, will be written in terms of the expanding economy and growing population of the past. This idea is held by the inhabitants of urban areas just as tenaciously as by the people who live in rural regions. In the urban areas it can be stated with confidence that people, as a rule, still think that our natural resources are inexhaustible, that habitual economic practices are the best and that what is good for the individual is good for everybody. Furthermore, it is generally believed that an owner may do with his property as he likes, that expanding markets will continue indefinitely, that free competition coördinates industry and agriculture, and that values will increase indefinitely.

In the rural areas people generally think pretty much along the same lines, and in addition have the idea that tenancy is a stepping-stone to ownership and that the factory farm is generally desirable.

For public officials of all kinds the existence of these popular notions should be clearly recognized and planning education is the most logical way for such recognition to be gained. In the general field of planning it is a commonplace that a program can move no faster than the public

opinion of the area will permit. This being the case, the officials charged with the responsibility of assisting in the making and carrying out of a plan should regard these attitudes as fundamental conditioning factors. Furthermore, planning education should include a critical examination and analysis of these attitudes in the light of our experience in the cities, in the rural areas (for example, in the Great Plains), and in the light of a national population which is approaching stability.

SUGGESTED PROCEDURES

There are many ways by which planning education for public officials can be organized and furthered. Only three are suggested here.

Unofficial planning groups could find an opportunity to advance planning education for public officials by preparing and distributing semi-formal presentations in pamphlet form of the consequences of the acceptance of the mental attitudes referred to above. These presentations would supplement and elaborate more basic research materials prepared by federal, state and local bodies. Unofficial groups could also see that professional publications carry semi-popular articles that are similar in outlook to the semi-formal presentations. Occasional monographs on outstanding cases could also be issued from time to time. Taken together, the preparation of such materials by unofficial planning groups would constitute a body of educational material on the adult level which would have value in calling attention to the attitudes referred to above and to the potentialities and dangers which they hold for the future.

In-service training of an informal sort is also suggested. This training, which might take the form of lectures and informal staff conferences, should be designed not to improve technical competency but to relate routine practices to general policies and to needed attitude revisions. Competent "generalists" as well as "professional planners" should be drawn in to accomplish this purpose.

The third suggestion is to continue and expand the conferences between public officials and unofficial planning agencies, particularly on different levels of government. This practice is already in general use but might be adapted and extended to include more regular contacts between planning organization officials and public officials, particularly on the federal and state levels. The educational value of such conferences may be as great as the immediate results from meeting a technical problem.

SUMMARY OF DISCUSSION

Your committee thoroughly believes that at an early stage of education, say in the secondary school, the pupils should be familiar with the subject of planning and community improvement, and that it would be highly desirable in undergraduate colleges to offer at least one full semester course in city planning, regional planning, and housing.

In the training of planning technicians the question arises where in the

campus framework should the technical course appear, if there is no special technical department which could take it over. As to this question, however, personalities and local conditions play such a large part that sometimes it would not seem to matter very much whether or not the planning work was conducted under the auspices of one department or another. However, there is a great deal to be said for having the work separated so that it would not be thought of as the child of any particular department or any particular field of work. In such a position it would be like the city planning commission in the city government—functioning as a separate entity but related to and of interest to the various departments of the city government. Coördination and reciprocal coöperation might thus be more easily furthered and achieved.

Your committee wishes to put special emphasis on the necessity of closer interdepartmental coöperation. Experience has shown that professional departments, such as sociology, economics, and law, have been drawn on by technical departments in universities for special lecturers. The technical teachers of planning are seldom asked to reciprocate.

As to adult education, your committee feels very strongly that the more the public is familiar with the idea of planning, the stronger the support for the technician in carrying through plans. The committee therefore recommends that the organizations working in the fields of planning should make every effort to supply information to the press, to stimulate articles in periodicals and popular magazines, to prepare lecture courses, radio speeches—in short, to use all means and methods to reach the public and to spread knowledge on planning.

As to the planning education of public officials, it was brought out in the report that unofficial planning groups have a great opportunity to assist by preparing and distributing research pamphlets by which the official can be made familiar with present trends in planning thought. Furthermore, there has been suggested an in-service training of an informal kind. This training might take the form of lectures and informal staff conferences; it is designed to relate routine practices to general policies rather than to improve technical competency. Here again the help and the assistance of the professional planner is needed.

In summarizing, let it be pointed out that the great variety of planning education must not necessarily be interpreted as a sign of confusion. We may take it as a sign of youth and growth, demonstrating the fact that here is a new field of education for which definite methods and traditions of teaching have not yet been developed.

Therefore, the unanimous opinion expressed as a result of a recommendation by Mr. S. B. Zisman urged the National Conference on Planning to set up a small planning educational committee, its members drawn from the membership of the three organizations sponsoring the conference, with the intention of developing definite policies on the particular problems of education which require immediate solution.

Migration and Economic Opportunity

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THE round table on Migration and Economic Opportunity was conducted altogether on a discussion basis. The chairman of the round table mailed a rather large volume of excerpts from literature on migration to members of the committee, to those assigned to lead a formal discussion, and to a number of other persons. Synoptic statements with citations of these excerpts are given in Part I. A discussion was started without any formal statement and no speeches were made. The chairman drew from the sixty persons present statements of the main issues involved in the topic and then guided the free discussion which came from all parts of the floor. The discussion is summarized in Part II.

PART I

The chief reason behind all types of migration is the desire on the part of individuals, or groups of individuals, to better the economic situation in thich they find themselves. At present the trend of migration is toward large commercial and industrial centers, chiefly in the North and East. The two most important problems presented by this migration are: discovery of the volume of it and of the relation between migration and the natural increase of the population.

See Warren S. Thompson, *Research Memorandum on Internal Migration in the Depression*, Bull. 30, S.S.R.C., 230 Park Ave., New York City.

Numerous factors in the development of this country which have kept our population a very mobile one are: the settlement of the West, the rise of urban industrialism, development of easy and rapid means of

transportation, mobilization for the World War, the appearance of wide differentials in natural increase and economic opportunity in different geographic areas, and the recent economic depression. This mobility has extended into the rural population and even into the farm population. One of the most important factors has been the rapid growth of cities, made possible by large and continuous rural-urban migrations which are of tremendous social significance.

See Charles E. Lively, *The Development of Research in Rural Migration in the United States,* Ohio State University, Columbus, Ohio. Mimeo.

The major effect of the business depression upon the farm population movement was to reduce the total volume of migration, both from and to farms; chiefly a retardation of migration from farms and a backing up of young people in rural areas. Farm population in poor land areas increased more than that on the better lands between 1930 and 1935, chiefly because the poor land areas had proportionately a greater share of their population staying at home.

See Conrad Taeuber and Charles E. Lively, *Migration and Mobility of Rural Population in the United States.* Forthcoming U. S. D. A. publication.

When there is a long-continued depression, the first criterion of population placement becomes not a matter of ideal choices, but the pressing concern of where people can find support. With the frontier closed and the outlet to the city at least temporarily gone, many people believe that in the future a larger proportion of the people will live and be supported on the land. If decentralization of industry occurs in the future, "urban occupations" will be carried on in very different sorts of communities, thus adding another variable to a problem already sufficiently full of unknowns.

See Carter Goodrich, et al, *Migration and Economic Opportunity,* University of Pennsylvania Press, Philadelphia, Pa., 1936.

In times when prosperity reigns in urban centers but there is not compensating prosperity in farm areas, as in 1925 and 1926, the total movement in both directions is increased, and furthermore, a greater per cent of those who migrate do not return. When, however, there is economic depression in both urban and rural areas there is less migration in either direction, but a high per cent of those who migrate remain in the localities to which they move. One generalization might be made—in periods of general prosperity many persons move but few remain at their destinations; in periods of depression few move but most of them remain at their destination; and in periods when prosperity is evident in one area but not in another, population tends to flow into the more prosperous area and the number who remain is also increased.

See Carl C. Taylor, Bushrod W. Allin, and O. E. Baker, "Migration Problems," *Yearbook of Agriculture,* 1938.

Although the assumption is probably valid that people generally move with the hope or expectation that they will improve their economic and social conditions, it must be recognized that the shifting about disturbs

the stability of family life, and that communities out of which or into which are moving any great numbers of families are, in the subtler aspects of community or neighborhood life, in a continual process of adjustment. For this reason, probably above all others, American community life has been to a high degree unstable. This was true during the pioneering period and remains true today.

Migration trends were considerably different in some sections of the Nation between 1930 and 1935 from those of the previous decade. The urbanward migration reversed itself during the depression, and in addition to the fact that the natural increase in farm population ceased to flow to the cities, there was during the year 1932 an actual net migration from urban to rural places. Some regions that had heavy out-migration during the 1920's continued to lose population during the next five years, but others that had had out-migration during the 1920's actually had in-migration between 1930 and 1935. A study of these various areas reveals some interesting facts, especially in relation to the apparent tendency for populations to pile up in bad-land areas during a severe industrial depression.

See Carl C. Taylor, Helen W. Wheeler, and E. L. Kirkpatrick, "Disadvantaged Classes in American Agriculture" (Chapter V), Soc. Res. Rep. VIII, U. S. D. A., April, 1938.

The migration from the Great Plains States in recent years is a continuation of a trend that was apparent in the preceding decade, 1920 to 1930. The contribution of population by these States to others during the 20's was apparently about 500,000. This, however, was not in excess of their own natural increase plus the in-migration from other States, Montana being the only State of the ten to have a smaller population in 1930 than in 1920. Thus, while data are relatively scarce, it would appear that the migration out of these States has been accelerated during recent years, the amount between 1930 and 1937 being greater than that for the preceding ten years. Most of this migration has probably occurred since the beginning of 1933; prior to that time migration from this area had been slowed down.

See Carl C. Taylor, "Recent Movement from the Great Plains." Typewritten Report.

Approximately 48,000 persons are believed to have migrated to rural Oregon during the seven years, 1930-36, 22,000 of whom entered during the single year 1936. The migration of the six-year period, 1930-35, is estimated at 25,000 excluding persons who settled in towns of 2,500 or more. Interstate migration to the farming areas of Oregon is thus estimated at nearly double the net increase in the rural farm population during this period. It is also estimated that rural non-farm population increased 20,000 during the six years, approximately 13,500 being due to interstate migration and the remainder a result of the natural increase and intrastate movement from rural farm to rural non-farm and urban to rural non-farm.

See Charles S. Hoffman, "Drought and Depression Migration into Oregon, 1930 to 1936." *Monthly Labor Review*, January, 1938.

On the frontier the number of farm operators declined more often than it increased during periods of general economic stress. On the other hand, the increases occurred in most substantial numbers in the older counties and especially those containing a town of some size. The significance of the shift resulting from depressed economic conditions appears to be therefore in urban-to-rural rather than old-country-to-frontier readjustment. This urban-to-rural movement was conspicuous while there still was an open frontier and it was conspicuous in the 1930-1935 period after the frontier was gone.

See James C. Malin, "The Turnover of Farm Population in Kansas," *The Kansas Historical Quarterly*, Vol. IV, No. 4, Topeka, November, 1935.

In the Southern States thousands of children are born and reared and then turned over to other sections ready to work. In 1930, 35,000,000 persons reported that they had been born in the South, but more than 4,000,000 of them had left the South and were living in other sections of the country. The South contains slightly more than one-fourth of the Nation's population (28 per cent). But in 1935 this one-fourth of the Nation's population contributed one-third (33 per cent) of all births in the United States. Moreover, it produced nearly one-half (46 per cent) of the total natural increase.

See Conrad Taeuber, "The Movement to Southern Farms, 1930–35," Reprint from *Rural Sociology Journal*, Vol. 3, No. 1, March, 1938.

This migration from the farms involves an expense to rural people that is not generally realized. It appears probable that the cost of raising a child on southern farms, including education, is not less than $125 a year. Assuming that this child is self-supporting at 15 years of age, we have a cost of $1,875 and this multiplied by the 3,600,000 net migration during the decade 1920-29, provides a rough estimate of $6,750,000,000. Add the transfer of wealth to heirs in the cities incident to the settlement of estates, and the resultant payment of interest on mortgage debt, or of rent, and the total cannot be less than $10,000,000,000 or $1,000,000,000 a year.

See O. E. Baker, "The Population Prospect in the South," Address before National Catholic Rural Life Conference, Richmond, Va., Nov. 8, 1937.

Migratory labor is a proletarian class, forced to till the soil for others, living in material poverty, to a large extent indispensable but nevertheless commonly exploited and substandard. It migrates reluctantly, lending itself readily to the development of a form of agriculture which is not a way of life but an industry.

No estimates of numbers of migrants in California are very reliable. Few measures are taken and fluctuations from year to year are great. The California E. R. A. estimated in 1935 that 198,000 laborers were needed at the harvest peak in 33 agricultural counties, and that 50,000 of these were non-residents of the county where the crop grows. The number which actually migrates, of course, is very much larger than the number

needed to perform the work, because labor distribution is far from perfect. Carleton Parker estimated 150,000 migratory workers on the Coast in 1915, mostly farm workers. The California Board of Education reported 37,000 migratory children alone in 1927. The number of persons—men, women, and children—who follow the California crops away from home at some time during the year may well have reached 150,000 in recent years, as some estimate.

See Paul S. Taylor, "Migratory Farm Labor in the United States," *Monthly Labor Review*, March, 1937.

The evidence of this report points clearly to the conclusion that the migratory-casual worker, despite his independent attitude and his pride in his ability to "get by" on the road, is in fact an under-employed and poorly paid worker who easily and frequently becomes a charge on society. Directly or indirectly, state and local governments are forced to accept some responsibility for individuals in this group. Hospitalization, emergency relief, border patrols, and the policing of jungles and scenes of labor disputes are examples of costs that are borne directly by the public. There is another cost which cannot be assessed in dollars: the existence of a group whose low earnings necessitate a standard of living far below the level of decency and comfort. The presence of such a group in any community, even though for a short time each year, cannot fail to affect adversely the wage level of resident workers who are engaged in the same or similar pursuits.

See John N. Webb, *The Migratory-Casual Worker*, Res. Mono. VII, Div. of Soc. Res., W. P. A.

Simply stated, the problem of the transient unemployed is this: No community welcomes the needy stranger who comes either as a competitor for what employment still remains, or as an applicant for assistance, when both employment and relief funds are inadequate to the needs of the resident population. In effect, a depression puts a premium on length of residence and stability; and those who venture to leave their home communities in search of work do so at the risk of being regarded with suspicion, if not outright hostility. But to some of the unemployed, stability and enforced idleness are incompatible states. Migration at least offers an escape from inactivity, and in addition, there is the possibility that all communities are not equally affected by unemployment. Since a narrowing of the labor market is one of the first signs of a depression, a migration of the unemployed might be expected as an immediate consequence. What data are available show this to have been the case in the most recent depression.

See John N. Webb, *The Transient Unemployed*, Res. Mono. III, Div. of Soc. Res., W. P. A., 1935.

One of the most dramatic and far-reaching social changes in a segment of the American population has been the movement of hundreds of thousands of Negroes from the cotton fields of the South to the largest

and most complex industrial centers. Static relationships in the South were exchanged for the dynamic of northern cities. A new set of living habits had to be formed. New communities were introduced to problems of race relations and new adjustments in family and community life were necessary for the migrants. Although the bulk of the movement went to the large cities there was some tendency of the Negro population to scatter into the smaller industrial centers between 1920 and 1930.

See T. J. Woofter, Jr., *Races and Ethnic Groups in American Life*, McGraw-Hill Book Co., New York, N. Y., 1933.

PART II

The round table on migration and economic opportunity proceeded to reverse its title in the course of the discussion. The problem actually discussed was "Migration and the Lack of Economic Opportunity."

The basic fact presented was the persistence of a large volume of human migration on this continent in spite of the lack of any adequate opportunities for the individuals who migrate. "What contribution has planning to offer for the solution of this dilemma of present-day migration?" the round table asked itself.

On one negative proposition there was close agreement among all those present: Unplanned and unguided migration is working very badly. This proposition was accepted as true as regards each of the four types of migration which were distinguished:

1. The traditional quest for new lands for settlement continues today, especially by migrants to the West, even though little new productive land is available. Reports from the Pacific Northwest indicate that only a quarter of the recent migrants to that area succeeded in settling on productive land.

2. Migration from rural to urban areas has been resumed after a brief interruption in 1932. But while a million persons moved from farms to cities in 1937, 800,000 moved from cities to farms. The net exodus from farms thus fell short of draining the surplus rural population. The rural population increased 90,000 during the year, in the face of curtailed farming opportunities.

3. Seasonal migration of an increasing number of farm workers and of some industrial workers continues and this constant stream of unguided migration produces unstable communities without furnishing any satisfactory balance between the demand and the supply of casual labor.

4. Displacement of workers by depletion of natural resources, by loss of markets and by technological changes is pouring increasing numbers into the stream of migration, even though no comparable opportunities are developing in the regions to which these displaced workers go.

The numerous and varied positive suggestions for meeting the problems of migration revealed some interesting differences of opinion both as to the rôle of migration and as to the rôle of planning.

As to the rôle of migration, the issue was joined between those who would prevent migration as far as possible and those who would accept it as inevitable if not desirable. All members of the round table were agreed that much of the present migration is wasteful and futile. But the preventionists dared to hope that planning might neutralize the forces giving rise to migration, while the friends of labor mobility hoped that planning might eliminate the futility while preventing some contribution of migration to a balanced location of population.

As to the rôle of planning, the question was how large a homestead the planners should stake out for themselves. You who have attended these sessions regularly will recognize the issues: Should planners emphasize research, the master plan, or persuasion? Should planners confine themselves to natural resources or tackle the problems of human resources? Should the planners confine themselves to the fringes of our business economy or tackle the reform of the capitalist system itself?

The proposal of the researchers was to study the forces behind migration so that we might predict the extent and direction of future human movements.

The proposal of what might be called the master planners was to blueprint the movements of peoples which should take place in the national interest, especially for the purpose of draining the areas of least productive opportunity. Such a blue print might be a useful weapon against special local interests.

The proposal of the advocates of persuasion was to concentrate on wise guidance of those who intended to move. Such guidance might apply both to the temporary move in search of immediate work and to permanent resettlement. Here the need seemed to be not so much the establishment of new agencies as the application of a more vigorous and sustained effort to make reliable information available to the workers who must decide whether to move or where to move. A greatly increased field of work was seen for public employment offices, for example, in checking the over-stimulation of migration as well as discovering the possible opportunities which may exist at a distance.

The questions as to the scope of planning, as distinguished from the emphasis of planning methods, were revealed when the round table discussed the means of removing the present lack of economic opportunity. Here the proposals ran all the way from extending relief to migrants to wholesale reform of the capitalist system.

One proposal of those who interpreted the scope of planning most narrowly was that adequate preparation be made to provide relief for those who do exercise their initiative in moving. The need for the removal of discriminations now arbitrarily imposed on non-residents was noted, as was the need of relieving those communities which are faced with the most acute relief problems because of the concentration in their areas of migrants in need of relief. While some of those present doubted

whether as short a step as a reform of the relief system should be dignified with the name of planning, others pointed out that the planning of more rational relief for non-residents was necessary if we are to avoid slipping back to the interference with labor mobility as a result of our reversion to Elizabethan concepts of enforced settlement.

Advancing from the planning of relief, the round table gave rather wide support to the planning of a new type of subsistence homesteads for the utterly homeless. These would be small garden plots, reasonably close to centers of demand for casual labor. Such garden plots to furnish a home base for those accustomed to move in search of work was believed to be a logical extension of the farm labor camps already established on the Pacific Coast by the Farm Security Administration. Location of these homesteads reasonably close to existing demands for seasonal labor would avoid some of the difficulties of the subsistence homesteads as previously planned. This specific remedy was urged as more fundamental and less costly than the extension of general relief to migrant workers.

Positive planning for increased economic opportunity was widely advocated. Long-range planning for economic expansion was advocated both for the "minus areas" of exodus and the "plus areas" of migration intake. In the various "minus areas," the restoration of forests, the conservation of water and soil, the extension of public power and the encouragement of industry would serve to employ some of the surplus labor, to increase the markets for the products of other areas, to expand the long-run employment possibilities in these devastated regions and to build up the health and morale of any remainder who must migrate eventually. Very similar measures were advocated for the areas now receiving migrants without being able to find economic opportunities for them. Delegates from the Pacific Northwest brought the most specific plans for land survey, extension of irrigation and power and the encouragement of new industry.

At this point, the largest differences of opinion developed. How far should planners attempt to go in advocating positive measures for an expanding economy? Some would stop with plans for the public lands. Others would give planners no less a task than the devising of a long-run program of capital investment by government to fill the gap caused by the contraction of private investment. On the left wing were those who would tackle the problem of insuring that workers were paid enough to enable them to buy back the products of industry. Planning a diversified farming was advocated even to the extent of providing for a self-sufficient culture, somewhat insulated from the risks of the market.

Migration presents the Nation with vital problems, worthy of much more extended discussion at future conferences. The insistence of this general conference that any national planning agency must consider human resources indicates that planners today are determined to give the subject of human migration a prominent position on their agenda.

Capital Budgets and Improvement Programs

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PART I

MYRON D. DOWNS

WHEN will the city plan be completed? This question is frequently asked of planning commission members or staff.

"Oh, the planning of the city is never finished," may be your reply, and such may be the truth.

However, within this official and professional gathering, may I ask if there is amongst us one planning commission member or executive who is in a position to state when he has planned to complete even the recommended proposals contained in his community's official city plan? If there be such a well-informed citizen or planner present, he should, by all means, be recognized first by our chairman, to lead discussion.

The average citizen has two important questions about city government in mind: when will more improvements be made, and why aren't tax bills reduced? In almost every case, he hasn't a good idea of all the physical needs of the community, and if he has, he feels that his section of the city should receive a preferential position in the allocation of funds. Then, when his neighborhood has been provided with adequate paving and lighting, and ample school, playground and park facilities have been installed, he immediately inquires why his taxes are not lowered.

Part of the answer to his question is to be found in the method of financing practiced in most municipalities; i. e., the issuance of ten- to forty-year bonds; and part lies in the inescapable fact that each new generation does have new ideas and in one way or another, does carry

them out. Despite the protests of the preceding generation, each generation has added some contribution, or burden, to the program of public works. Although many people do not desire larger and better-equipped schools, recreation grounds, or airports, public housing and hospitalization, or divided highways with park-like surroundings, nevertheless, practically all are in favor of one or more of these public facilities.

City planning agencies have only just commenced the tremendous task of planning the distribution or location and extent of these many public works. This condition is the conclusion of the writer as the result of communicating with the chairman of the planning commission of each city listed in Circular Ten, National Resources Committee, as possessing a "long-range financial plan." The fifty-one cities listed happen to be divided into groups of seventeen in each of the following population classes: cities of less than 25,000 population, 25,000 to 100,000 population, and cities having more than 100,000 persons in 1930. A copy of the "long-range financial plan" previously reported to the National Resources Committee was requested and permission was asked to exhibit the program at this meeting. The chairman or representative of fourteen commissions made reply, five stating that they had no such program, five that they had prepared one bond program at some time within the past twelve years, and St. Paul, El Paso, Richmond and Cincinnati submit in display at this conference copies of their programs for your scrutiny.

The District of Columbia reported that its six-year programs "are merely a compilation of the respective estimates submitted by each department and agency of the Federal and District Governments for work in the District and its immediate environs. In no sense are these estimates reviewed by the planning agency."

The method of preparing a "long-range financial plan" is described in considerable detail by Mr. Merrill, and Mr. Lewis' paper describes in some detail the method of planning and budgeting capital improvements as specifically required under the provision of New York City's charter. Therefore, it would seem unnecessary for me to say anything further about method and procedure, except to record that the planning commission of Cincinnati, together with the city manager and council finance committee chairman, have met at least twice yearly since 1927 with the representatives of the other two principal taxing bodies of Hamilton County—the Cincinnati board of education and the county commissioners—to determine the total bond-issuing program and whatever program of referendum issues seemed desirable.

Two definite weaknesses appear to dominate the whole idea thus far. First, the procedure requires a degree of planning detail for which adequate personnel is not available. The long-range financial plan contemplates infinitely more work than our municipal planning or administrative agencies have as yet seen fit to devote to any matter, the immediate need for which is not readily apparent. Second, as the result of this

primary weakness, current programs for expenditure and construction represent little more than the realization of projects recognized by the planner as the outstanding deficiencies. Only if and when the planners are able to lay before the legislative and administrative officials more complete long-term programs will the public be conscious of community requirements. The stabilization of the tax rate, and not the need of essential improvements, has been considered at all times the factor paramount in program-making. Although the first five-year (1928–1932) improvement program of the Cincinnati commission has been almost completed, eleven years have elapsed, and intervening programs have been sidetracked in most years to permit the financing of work relief programs containing a great number of small pieces of construction of no major importance from the standpoint of the city plan. The cost of relief, administered either by direct cash payments or by financing work relief projects, has not been considered as an additional financial requirement of the city, but as a substitute for expenditures for major improvements.

Adequate planning—more planning—is the inescapable answer to all of these unsatisfactory situations.

PART II

ROBERT KINGERY

BEFORE I knew anything about budgeting and programming of state appropriations for permanent improvements I thought, as most people undoubtedly think, that state programming was lax, that it was a hand-to-mouth arrangement each biennium, and that depending upon the condition of the treasury and the attitude of the general assembly, more or less money was asked for and provided.

As a result of some personal experiences in state budgeting and programming, the following examples of such policies in Illinois are given.

Nine years ago a board of state park advisers was appointed by the governor of Illinois, whose five members took the job seriously. I was one of the members. We were advisers on state park matters to the director of the department of public works and buildings, in which there are four divisions: highways and state police, state parks, state waterways, and architecture and engineering. We found some of the records of park ownership were inadequate; we found a fairly complete but not adequate state park policy of land acquisition and maintenance and yet we found a sensible biennial budgeted program of permanent improvements which were then conceived to be necessary.

That board of state park advisers, jointly with the head of the department of public works and buildings, developed a long-term plan and policy which, in due course, were set up in the law. Then all that was necessary was to base a long-term program upon the needs for capital

improvements on the park lands and to provide sensibly and adequately for the accommodation of the visitors and the maintenance of the property under a visitor load. Thus there was not needed a reorganization of the capital programming plan but rather an extension of it to accommodate the expanded acreage.

In 1931 my personal experience was enlarged by appointment to the commission on future road program for Illinois, whose job was not only to review the past program of permanent highway improvements, but also to look forward for ten years or more, visualize clearly the situation which had developed and devise a new course of improvements on the highways of the State.

Here again the commission members discovered that the preceding twelve or thirteen-year program was fairly intelligent in so far as the system of highways had been designated by legislative act, and that the apportionment of funds for different classes of improvement was fair in accordance with the "then" needs.

The commission found, however, that in the next decade from 1933 to 1942 the three principal undertakings should be: (1) The modernization and rehabilitation of the older main state highways; (2) the reconstruction of many city and village streets connecting with those highways, and (3) the more rapid extension of the secondary type of road surfacing into the areas not already served, as feeder or land service roads.

In due time the commission completed its report and recommendations, developed the text of laws to put it into effect and was successful in obtaining the adoption of practically all of the legislation it proposed.

About the time of the presentation of the report to the governor and the general assembly, I was appointed director of the state department of public works and buildings, and held the office approximately four years.

Again, this legislation in the main merely applied and extended for a future period of from five to ten years many of the existing principles of programming and budgeting.

Immediately upon the adoption of the legislation in 1933, the state division of highways completed the development of comprehensive lists of projects on a mapped system of major highways, municipal streets and secondary roads.

In the five years between 1933 and 1938 no major deviation has been made from that general plan except as has been made necessary by the uncertainty of Federal budgeting of highway allotments to the States, and those changes have been principally the deferring of certain lists of projects.

Another example of long-term programming in Illinois is that of the public buildings, including the central administrative buildings for state purposes, the five state normal school properties and the twenty-seven penal, hospital and welfare institutions which are under the direction of

the department of public welfare. The central administrative buildings, being jointly under the management of the governor and the secretary of state, had a somewhat less comprehensive plan and yet the general plans for additional building space were ready and merely awaited the availability of funds. When the rental of privately owned office space became so high as to justify economically the construction of the next state building group, funds were appropriated by legislative action and two buildings were erected—a combined armory and office building, and an archives building.

Similarly, general plans and layout for additional necessary buildings and structures at the five state normal schools had long been in existence under the direction of the state department of registration and education, furnished by the division of architecture of the department of public works and buildings, in accordance with the state civil administrative code.

As the needs became pressing, the program was simply advanced, and as rapidly as the required appropriations were made, details of the necessary buildings and structures were prepared and the buildings erected.

In the department of public welfare, the director has had for many years a general program for such expansion as has been indicated by the trend in the number of patients and public charges of all classes. The plan is twofold: first, the provision of additional facilities at the existing institutions, and second, the acquisition of new sites for expansion of the facilities for the purpose of further segregation of criminals or others.

The division of architecture has, over a period of years, developed general layouts of these institutional properties jointly with the technical experts of the public welfare department. Plans of typical buildings had been developed for dormitories, mess halls and kitchens, laundries, power facilities, sewage treatment plants, and the like. Sometimes this program is retarded with the result that facilities become crowded, conditions approach the impossible and the dam is released with the provision of new funds and the program gets into operation again.

We have found in Illinois that the general assemblies and the governors appreciate such advance planning and budgeting; and the more clearly defined such plans and budgets are, the more likely are the general assemblies to provide the necessary funds. In those departments which have less tangible plans and budgets, both the general assemblies and the governors are inclined to give them short shrift.

However, we of the state planning commission are likely to be innocent of knowledge of such programming, and may be inclined to believe that there is no sound planning unless we ourselves have had much to do with it. Frequently such an attitude, not uncommon throughout the country, is a gravely erroneous one. There are many good planners and budgeters who do not give themselves those titles.

PART III

HAROLD M. LEWIS

THE need for an orderly program for carrying out capital improvements is particularly acute in a city which forms the center of a metropolitan district and in the surrounding region.

In such regions a large part of the nation-wide public works programs have been concentrated. Tremendous costs are therefore involved. There are conflicting interests in the different municipalities. The rapid growth, combined with a decentralization of population, which has taken place in such areas during the past few decades makes it important that public improvements therein be planned as part of a carefully prepared and long-time program. While population growth throughout the country is rapidly slowing down, metropolitan districts are still drawing population from other sections. Sudden changes in the distribution of population within such districts may therefore continue. These are some of the reasons why capital budgets and improvement programs are urgently needed in such places.

A FIVEFOLD PROGRAM

Five definite steps are desirable in the preparation and execution of such programs.

First, a master plan is needed on which to base the program. There should be separate master plans for each of the municipalities and counties in the region, but a regional plan which will weigh the needs and ambitions of each separate municipality and provide a framework into which local plans can be fitted is also essential.

Second, a study should be made of the probable future income and departmental expenditures of each municipality to determine how and to what extent a capital improvement program can be financed.

Third, long-term capital budgets should be worked out for each municipality and brought up to date each year. These should be adopted by the elected officials, and appropriations for capital improvements should then be limited to items in such budgets.

Fourth, a regional planning agency should keep constant check on the proposals of region-wide importance. This would indicate which are the most urgent missing links and a list of such projects should be prepared periodically as a guide to those responsible for the local problems. Such regional agencies may be official or unofficial, but in either case they will remain purely advisory.

Fifth, each local planning agency should be given some definite control over the selection of projects which will go into the official capital budget. The authority and responsibility for the final selection must remain with the elected officials.

GENERAL ADVANTAGES OF ADVANCE PLANNING

Experiences of municipalities throughout the country during the past five years have taught them a valuable lesson. Those which had been far-sighted enough to provide themselves with an advance program have been able to use public works as an effective means of relieving unemployment and hav ereceived full value in return for each dollar expended directly or supplied from Federal emergency appropriations. Where such programs were not available, hastily conceived projects have had to be substituted with considerable waste of money and energy all along the line. Delays were common, and many projects failed to be approved.

In normal times it is equally advantageous to have a comprehensive group of projects prepared well in advance. If material prices and land values are unfavorable for certain ones, they can be deferred in favor of others with a considerable saving to the public purse.

It is quite customary that the relative efficiency of the various official departments will vary with the efficiency and initiative of their executive heads. The department that is progressive and is well ahead in its planning is able to get its projects adopted and financed. Other departments may have projects equally urgent which will go by default. It is part of the job of the city or county planning commission to see that the proper emphasis is placed upon different needs and that departmental expenditures do not get seriously out of balance. It cannot do this directly but it can do it indirectly through the medium of a long-range program.

In general, it may be said that a master plan for a city should provide for its general development for the next 25 to 40 years. The official program, such as would be prepared in detail by the city departments, need not look so far into the future.

The long-range capital improvement program adopted by the city or county governing body should cover all types of projects to be undertaken within a certain period of years. The National Resources Committee has advocated the preparation of six-year capital programs as a desirable standard for local, state and Federal agencies. Nevertheless, only a few of the municipalities and counties in the country have any official program for the future construction of capital projects.

SITUATION SHOWN BY NATIONAL INVENTORIES

The public works inventories sponsored by the National Resources Committee in 1935 and 1936 cast a good deal of light upon the situation. In 1935, municipalities were urged on by the possibility of obtaining large amounts of Federal funds for the execution of projects included in the program. A tremendous number of projects was submitted by a great variety of agencies, but very few proved to be based upon carefully prepared programs. In the State of New York, 3,719 projects were submitted with an estimated cost of about $2,443,500,000, almost $1,000,000 000 of which was submitted by New York City.

In the 1936 inventory it was obvious that the interest of the municipalities and counties had waned considerably. The lure of Federal grants had largely disappeared and they were asked to submit a program which they would normally expect to carry out. In only one city (Buffalo) in New York State was reported an official five-year capital budget program. Yonkers and Schenectady also have some form of capital budget. In many of the smaller cities and counties they literally did not know what projects to include, for they really had no program which they were willing to stand behind even for one year in advance. Only 188 projects, with an estimated cost of $69,983,000, were submitted by counties and their political subdivisions and 162 of these, with a cost of $64,097,000, were in the three counties of Erie, Niagara, and Monroe where county and regional planning boards assisted in the compilation.

The following facts seem to have been largely responsible for the failure to get better local returns in New York:

1. During the preceding few years the questionnaire habit had been worked to death, and to many the inventory problem came as just one more questionnaire involving unwelcome work on their part.

2. Most of the local agencies apparently had no public works program which they were willing to put forth as a normal one, although they had been willing to list in the 1935 National Inventory desirable projects which they would have been glad to have at no expense to themselves.

3. The questionnaire was unnecessarily involved and a simpler one would have stood better chances of being filled out. For example, the proposed rating appealed to many as impractical and the persons to whom the form was referred were unable to supply detailed information in regard to annual expenditures, daily employment, probable amount of grant and similar questions.

4. No special funds had been supplied for carrying out the inventory but the state planning boards had simply been asked to add it to their programs. A field staff to interview local officials, explain the purpose of the inventory and help them prepare the material would certainly have been of great help. The Division of State Planning was unable to supply such a staff.

I believe that the National Resources Committee should continue to publicize the need of local capital improvement programs, but that the burden of much of this educational work must be assumed by county and regional planning organizations.

BORROWING TO BUILD

It has been generally customary for major public improvements to be financed by the issuance of bonds. In some cases these have been for such long terms that the city has been compelled to keep on paying for improvements long after they have been worn out. Such a procedure has been disastrous and has led to serious financial difficulties. Conservative

borrowing is a logical procedure, however, and will undoubtedly continue to be one of the methods used for financing improvements of more or less permanent value.

Several States have adopted legislation whereby the bonded indebtedness of the municipalities therein is limited to a percentage of the assessed valuation of real estate, but there is a great variation in the method and extent of such limitation. Only in New York, where cities may borrow up to ten per cent of their real estate valuation, is it written into the constitution, and only in New York are local assessment bonds included in the limitation. New Jersey has a ten per cent limit on general, school, water and other public utility debt and Massachusetts has a two per cent limit on general debt. In New York self-liquidating debts, such as water supply bonds, are exempt from the debt limit.

Where municipalities have borrowed close to their legal limit they have been faced in the past few years with the danger that decreased real estate assessments would reduce their legal limits to prevent any further borrowing, or even make their present debt greater than that authorized by the State. As a result of this experience some States may adopt legislation to place further limitations on the borrowing powers of municipalities.

In the State of New York there is no such limitation on bonded indebtedness for towns. This is one of the situations which the New York State Planning Council thinks should be remedied at once.

PAY-AS-YOU-GO POLICY

An alternative to issuing bonds for financing capital improvements is to proceed on what is called a pay-as-you-go system, where only so much may be spent on capital improvements each year as may be raised for that purpose out of the tax levy and any other sources of general income. Setting up any such program will require a careful study of both sources of income and expenditures which should be carried about twenty years into the future.

Within the last three years an additional item of emergency relief has come into the picture of expenditures and has seriously upset many municipal budgets. The question of continuance of such expenditures and how they are to be met is a serious one. Departmental expenditures have in general increased with the population. Still greater increases have resulted from the continued demand for new public services, particularly along lines of recreation, hospitalization, education and other social betterments.

If some reasonable estimate of future departmental expenditures and future debt services can be prepared and plotted on a diagram showing estimated total future income, it will be possible to get some indication of how much balance is likely to be available for capital expenditures on a pay-as-you-go basis.

An example of a complete pay-as-you-go policy is the Milwaukee scheme (also adopted in Kalamazoo) whereby a reserve fund is built up from current income. No additional bonds are issued and the city borrows from its own reserve fund to finance such capital improvements as cannot be financed from current income.

A gradual shifting to a pay-as-you-go policy is provided in New York City's new charter which states that the proportion of the cost of capital improvement to be financed currently by serial bonds shall be increased two per cent per year, taking fifty years for the complete transition.

LOCAL ASSESSMENTS

Where capital improvements result in direct financial benefits on adjoining property, it is only logical that a local assessment should be levied on such property so that part of the benefit may accrue to the city as an aid in financing the project. The establishment of an equitable system of benefit assessments is a complicated problem and is being studied by a special committee of the City Planning Division of the American Society of Civil Engineers. Much research must be done before any satisfactory standards can be worked out.

During the recent depression there has been a serious weakening of the local assessment machinery due to the fact that assessments previously laid against benefited property have frequently been assumed by the municipality upon complaint of local hardship. Adoption of city-wide programs financed entirely from general city funds, even though the projects were local in character, has also tended to break down the theory of local assessments. It is going to be difficult to get back to a sane assessment basis.

STABILIZATION OF LAND VALUES

Owners of improved real estate have in the past expected the value of their property to be maintained at its original cost to them, or to yield them a great profit due to the increased value of the land. With population stabilizing, we must face stabilization of land values. This means that the owner of a building, and the city official who places the assessment on such a building, must be prepared to write off its value over a normal depreciation period just as we all do on our income tax returns for our automobile if used for business.

If tax assessors would agree to reduce building assessments annually, so that they would reach zero at the end of the normal useful life of the building, then the owner, the city and the tenant should all benefit. The owner would have tax relief and could afford to rent his building at a lower rate to a tenant. While the city would lose taxable value on old buildings, I believe it would gain in the end through fewer tax arrears, the promotion of new building in new areas and rebuilding on old sites, and the avoidance of blighted districts as a result of such rebuilding.

CAPITAL BUDGET IN NEW YORK CITY

The new charter for the City of New York, which went into effect January 1, 1938, contains some rather novel features in regard to the control of a city planning commission over the capital budget of the city. While this control is indirect it should prove effective.

The preparation of a proposed capital budget and program is made the responsibility of the planning commission, which must submit the proposed budget to the board of estimate, the council, the director of the budget and the comptroller not later than November 15 of each year. To provide an adequate basis for such a budget the planning commission must prepare a master plan of the city showing existing and proposed improvements. The comptroller must advise by August 15 of each year the amount and nature of debt which, in his opinion, the city may soundly incur for capital projects during each of the six succeeding calendar years. The head of each city department should submit, also by August 15, a detailed estimate of all capital projects pending which he believes should be undertaken within the six succeeding calendar years. By September 15 the mayor shall submit to the planning commission the report to him of the director of the budget (stating the maximum amount of indebtedness which he thinks the city may incur for capital projects during each of the six succeeding years), together with the mayor's certificate as to the maximum amount of debt which, in his opinion, the city may soundly incur for capital projects during the ensuing calendar year. The mayor shall at the same time send the planning commission his recommendation as to the capital projects to be included in the capital budget.

On the basis of this information the proposed capital budget of the planning commission is to be prepared. It is to be in two parts. The first shall cover all authorizations recommended to be adopted for the ensuing calendar year, the aggregate amount of which shall not exceed that specified in the mayor's certificate. The second part will be a program for the five calendar years next succeeding such ensuing calendar year.

The board of estimate will hold hearings on the proposed capital budget, which must be adopted by it between November 25 and December 4 inclusive. If the board of estimate desires to include a project not in the proposed capital budget, it must request the city planning commission for its recommendations on such project. If the latter recommends it, it may be included in the capital budget. If it does not recommend it, it may be included only by a three-fourths vote of the board.

Following adoption by the board of estimate, the council must also consider the capital budget and may strike out any project included but may not add additional projects.

This is an excellent example of how a planning commission with only advisory functions may, nevertheless, exert a very positive control over

capital expenditures. The procedure is now on trial in New York City and I feel confident that it will work and will be copied by other municipalities.

PUBLIC WORKS PROGRAM FOR NEW YORK REGION

The regional plan of New York and its environs, as being carried on by the Regional Plan Association, is an example of the effective use of regional public works programs.

The Graphic Regional Plan was published in 1929 and included a list of 51 proposals presented as requiring urgent consideration. Four years later, in 1933, progress on these was reviewed and it was found that 15 had been completed or were being carried out, in whole or in part; an additional 13 had been officially adopted or studied, in whole or in part. A new list of 47 urgently needed projects was presented, grouped under the headings of traffic improvement, transportation improvement, conservation and development, new park areas and relief of traffic knots.

Four years later, in 1937, a second report of progress was made and it was shown that construction had taken place in whole or in part on 20 of the 47 projects in the earlier program (14 of these 20 had been proposed for construction and the other six for only mapping or further study). Acquisition of land had occurred on five additional projects. Substantial progress was therefore recorded in spite of the depression years and some parts of the program had advanced even faster than was contemplated.

A new list of urgently needed projects was again presented, this time including 42 grouped under traffic improvement, improvement of transportation and new park areas.

It has been demonstrated that such regional public works programs are welcomed by both the officials and citizens within the region and are being used more and more for checking the urgency of local projects which may be advanced for official action.

A municipal planning commission may well approach the problem of a capital improvement program by listing proposals on their master plan under the following three headings: first, those which might be carried out within the next six-year period; second, a group for consideration within the ensuing six-year period; a third group which would include projects for later consideration. It would be desirable to have approximate cost estimates for projects in the first two groups and the total cost for each group should not exceed that which could reasonably be financed within the period.

An absolute essential for any capital budget program is periodical revision and extension so that it will always look ahead for about the same period of time.

PART IV

HAROLD A. MERRILL

According to recent estimates by the United States Department of Commerce, total expenditures for public and private construction in the United States reached the peak of nearly 14 billions of dollars in 1927, declined to a low point of 4 billions in 1933, and in 1937 amounted to about 8½ billions. Total construction averaged about 10 billions per year for the years 1920-1924, about 13 billions per year for the years 1925-1930 and about 6½ billions per year for the years 1931-1937, inclusive. During the past decade, public construction expenditures by Federal, state and local jurisdictions have averaged about 3 billions of dollars per year, and varied approximately from one-fourth to one-third of the total of all construction activity. About one-tenth to one-fifth of all public construction has been Federal.

If during the next decade, expenditures on public works by all units of government for normal activities in the development of resources and public improvements continue in approximately the same amounts as during the past two decades, a potential ten-year program amounting to no less than 30 billion dollars is visualized.

WHAT ARE PUBLIC WORKS?

The scope of the meaning of "public works" has gradually expanded and will continue to be modified with changing conditions. The limits on the growth of the field are determined by the public will, national wealth, standards of living, and willingness to pay. A hundred years ago, public works were limited to lighthouses, public buildings and military and naval equipment and facilities. Later public funds were expended on rivers, harbors, and flood control followed by reclamation projects and public roads.

Today expenditures by Federal, state and local governments for public works cover a wide range of activities, such as transportation, water projects, rural electrification, housing, recreation facilities, public buildings, erosion control, forestry, surveys and plans, to mention only a few of the major categories. This list has been still further expanded in the efforts of the government to provide useful work for the unemployed and persons on relief during the depression. In short, the growth of public works expenditures has kept pace with national development, national wealth and industrial expansion.

At the same time, the investment in public works by States and local governments has expanded at even a faster rate than Federal expenditures. The States have matched Federal grants for highways, for forest conservation, and for educational and welfare activities, and have erected

[1] *Construction Activity in the United States*, 1915–1937, United States Department of Commerce, Bureau of Foreign and Domestic Commerce, 1938.

schools and other public buildings on lands donated by the Federal Government. Counties and townships have built roads and schools; cities have spent billions on streets, schools, parks and playgrounds, on utilities and sewers or marketing and terminal facilities.

As the concept of the public works functions of government expands, it becomes increasingly evident that both long-range planning and programming by each unit of government and coördination of all these plans for the country as a whole have become essential in the interests of economy and of an orderly and unified development. This need has been further emphasized by the measures taken by government (to combat the depression in utilizing public works to give employment) which have again focused attention upon the necessity for systematic advance preparation in order to reduce to a minimum the delays ordinarily met in putting men to work quickly.

COMPREHENSIVE PLANNING

If we are to plan our public works on a long-range basis, we must be prepared to estimate today what we must build two, three, or even six years from now—what highways we shall pave, what new water supply we shall tap, what light and power facilities we shall call into existence, how we shall extend or remodel our transportation systems, how we shall control our rivers, what parks and playgrounds we shall establish. To make such estimates more than mere guesses, we must know a good deal about the area under consideration and its place in State and Nation; a good deal not only about its present but about its future. We must know its physical features and the services rendered by public and private agencies to the inhabitants and others who use them, we must know the sources of its wealth, the nature of its citizenry, its rate of population change; we must understand its dependence on the larger world outside its physical boundaries and its means of contact with it. All this we must consider in the light of the ideal of providing and insuring a minimum standard of living upon as high a plane as the wealth and resources available will permit. In short, we must work the elements of community living into an appropriate plan for orderly development.

Through comprehensive planning a series of individual projects intended for execution over a period of years can be made to contribute toward the attainment of larger goals than can be realized by piecemeal and unrelated planning and at the same time the value of the individual projects may be increased thereby. Each Federal department or bureau concerned with public works has specialists or agencies engaged in planning its particular projects. This is likewise true of the States, counties and municipalities. However, a collection of projects each in itself meritorious and well-designed does not make a comprehensive plan. They cannot be treated in isolation but must be so fitted into the general scheme as to achieve a whole.

Each project must of course be adequate for the purposes for which it is intended; but the relative merits of alternate proposals for accomplishing the same purpose must be weighed. Multiple uses of the same project and related projects must be taken into account not only for present but future needs as well.

The numerous interrelationships between the various projects, both existing and proposed, in a planned development must be studied with a view to integrating them to a unified scheme with respect to physical location, size, and character. Thus building may proceed over a period of years with assurance that when each project is completed, it will properly fit into the predetermined pattern of development. In effect the comprehensive plan is a reservoir of projects to be drawn upon as needs dictate and as they can be financed.

PROGRAMMING

Formulation of the long-range public works program is a planning function employing the techniques of the physical planner and those of the financial planner, with due consideration for social and economic conditions and controlling financial factors which are constantly changing. The procedure involves program planning and budgeting. Whether they are carried on by one agency or individual or by several agencies or individuals matters little so long as the operations are all coördinated during the process and integrated results are achieved. Obviously the greater the complexity of governmental agencies, services and interests involved, the greater will be the necessity for division of labor and adequate machinery for insuring coöperation and coördination.

Program Planning: Program planning is the function of determining what public improvements, incorporated in the comprehensive plan, will best serve social and economic ends and carry our governmental policy for the period under consideration, and of establishing the appropriate priority relationships. It will be concerned with considerations of timing planned projects in relation to need, to effect on the business cycle and to sources of labor and materials, determining the volume of public works for the current year or biennium, and for a more extended period, and with the distribution of the total volume, geographically by type of work and between political jurisdictions. The program should cover a six-to-ten-year period and should be annually revised and extended because new conditions arise from year to year which influence decisions previously made.

Selection of desirable projects requires careful project analysis by qualified technicians. The criteria to be applied should include not only engineering soundness and financial, economic and legal tests but also conformity to larger plans. Unemployment conditions, financial status, fiscal policies and similar considerations are involved. Experience of the Public Works Administration and the Federal Employment Stabiliza-

tion Board amply demonstrates that advance programs can be developed and that they are useful.

Project Selection and Criteria: The selection of projects to be included in the program and their time sequence within the period covered will be determined by the criteria chosen. The National Resources Board in its December, 1934, report recommended consideration of the following criteria for selection of public works:

"1. The criterion of balance, including considerations of proper proportion between expenditures, within a limited budget, for the several kinds of public works and based primarily upon balance and proportion in the several services rendered.

"2. The criterion of service standards, whereby deficiencies are measured by arbitrary standards of service established at or somewhat near the peak of actual accomplishment, plus reasonable probability.

"3. The criterion of essential services, applicable to such basic needs as those of water supply, sewage disposal, and fire protection, with the chief determinant simply that of whether physical conditions and degree of population concentration make these services essential to a community's well-being.

"4. The criterion of cost, including the following factors: Amount of total available income (dependent upon community wealth, public opinion, and public view as to what represents the real cost of public improvements); funds available for a given class of public works as determined by balance; and value to be received and benefit to be derived from a given project at a given cost, in consideration of all other needed improvements of the same class.

"5. The criteria of relative need and relative benefit of individual projects in relation to and in consideration of all other needed improvements, as determined by coördinated and comprehensive plan. These criteria are the determinants of sequence of projects.

"6. The criteria of trends, and of growth and development potentialities, by which the extent and character of future requirement improvements and services may be measured. Such trends and potentialities in turn are determinable by exhaustive survey and analysis of conditions and trends, and by comprehensive long-range planning.

"7. The criterion of emergency, with application varied according to whether projects involved are those for the replacement of necessary public works destroyed by fire, flood, or other catastrophe or whether these public works represent speeded-up execution of normal expansion of development of improvements and services.

"8. The criterion of social and economic desirability, which for practical application must be based largely upon such arbitrary standards as may be established under item 2 above. (Many conceivable public works are quite without economic utility or social desirability, as determinable by applied common sense. The economic and social desirability

of expansion of accepted and useful services is relative and in the last analysis limited only by public opinion and by limits set upon public expenditure by public opinion.)"

Referring to these and other criteria, the National Resources Committee in its December, 1936, report on Public Works Planning said, "These criteria are suitable for use in relation to the median or normal program, but in the selection of projects for an expanded program in periods of depression not only these criteria but additional factors must receive consideration. An example of the type of question involved in depression periods can be taken from the experience of the Public Works Administration and the recommendations of the National Planning Board in 1933, which showed:

"*Planning considerations:* Conformity with comprehensive city, regional, or state plan: Indicate whether plan is city, regional, or state plan, whether official or unofficial, and give status of plan, date of plan, consultant, recommendation of planning board, if any, present membership and consultant to board and date of recommendation.

"Metropolitan or regional significance: Consider relation of project to similar or affected proposals in same metropolitan or regional district.

"Priority of projects: Consider comparative importance and desirability of the project to other proposals in same district which have been, or may be submitted, particularly where bonding power or other limitations are likely to limit number of projects which can be undertaken.

"Sequence: Consider relation of project to other dependent construction, as bridge approaches before bridges, or sewers before pavements. Is full use of project provided for when completed?

"Regenerative character: Consider stimulative effect of project upon other or additional construction by private or public agencies. Desirability and kind of additional work.

"Competitive character: Is facility provided by project in competition with existing facilities of same kind, or of same general purpose, such as railroad *versus* highway, public *versus* private waterworks, etc.?

"Permanence: Is project a palliative or a final answer to specific need? Is the utility of the facility provided measurable in terms of years?

"Continuing costs: Consider possible additional outlays required for maintenance and operation and who will bear such costs.

"Changes in community: Consider effect of direction of community growth, location of industries, population trends, etc., on continuing utility of project.

"General: State additional significant facts on social economic desirability of the projects. Has the proposal in its general and economic aspects your approval based on your best judgment?"

These points were covered in Bulletin No. 1 of the Public Works Administration. The application forms required additional information on the time for starting construction, the man-year costs, availability of

the site, type of personnel employed on the site and in the manufacture of materials, climatic conditions, etc.

"A third set of criteria relates to the availability of labor supply. The United States Employment Service, which now has offices reaching every community throughout the country, maintains a continuing register of all persons who are voluntarily seeking work, either on public or private enterprises.

"A comparative study of changes in the occupational and geographic distribution of the available labor supply from time to time will offer valuable indications of occupational trends and of developing shortages and surpluses. Such data should and could be used as one of the criteria in determining the type and location of public work projects.

"Still another problem in the selection of projects for a long-range plan is the geographic distribution of allotments for construction projects. Here again some experience has been obtained through the work of the Public Works Administration. The National Planning Board in September, 1933, after review of the criteria for geographic allotments in a critical economic period, suggested consideration of: (1) Population by States or regions. (2) Unemployed by States or regions. (3) Relief funds by States or regions. (4) Families given assistance by States or regions. (5) Federal income by States or regions. (6) Area. (7) Combinations of some of the foregoing, with varying weights for different factors."

Each of these possible methods of testing distribution of funds has its own advantages and limitations, and each may contribute significant considerations to be kept in mind.

Population provides a general test by comparing percentage of funds with the percentage of population in the several States. The advantage of this method lies in its simplicity. But the needs of the States, from the social or economic point of view, may or may not be proportionate to population. Just as the aid to the unemployed provided by a project cannot be judged wholly on a basis of location, so also the need for aid cannot be judged wholly on a basis of population.

Unemployment figures would presumably show the need for aid if they were available or accurate. Even if such figures could be obtained, they would not show the whole story, for they would not include many cases of distress which are well known to exist. Self-employing rural distress cases, for instance, would not be covered by this classification.

Relief funds also are incomplete as a guide.

Families receiving aid as shown on the tables compiled by the Federal Emergency Relief are, perhaps, the best indication of need available.

Area bears less relation to need than any of the methods just discussed, and is therefore not recommended.

Combination, with varying weights for different factors. The Recovery Act, in section 204 (b), established a basis for allocation of highway funds, as follows: Seven twenty-fourths by area; seven twenty-

fourths by mileage of rural delivery routes; and ten twenty-fourths by population.

This combination of factors is obviously not applicable to the whole program of public works, because of its special relation to post roads and omission of unemployment relief as a factor. The existence of this method as a part of the basic act does, however, suggest the advantages of a weighted factor combination as a test for distribution of projects.

The best combination appears to be an average of the population, unemployment, relief, and family figures discussed above. This average may prove useful as a measuring stick if allocations are figured 60 per cent in accordance with location of the project and remainder distributed by source of materials and similar considerations.

Application of Criteria: The following considerations involved in applying these criteria are repeated with some modification from the National Resources Committee's *Suggested Procedure for Public Works Programming by State Planning Boards.*

Permanent Social Need: (a) Does the project conform to a comprehensive community, state or regional plan? It is realized, of course, that for every project there must be plans in the sense of specifications. The question refers to the relation of this specific project to other proposed improvements and developments. If the plan is prepared in sufficient detail to indicate not only location, but type, capacity and general design of contemplated future construction, conformity to this plan will be an approximate measure of permanent social need. (b) What type and standard of service will be rendered by the project? The protection of life and health would normally fill a more permanent social need than preservation of property, while the latter would ordinarily take precedence over projects not falling under either of these headings. (c) Will the project confer a general benefit on the State or region as a whole, or will benefits accrue to a limited area or group? (d) Will the project be of a regenerative character, serving to stimulate other or additional construction by private or public agencies? (e) Is the project a palliative or a final answer to a specific need?

Financial Advisability: (a) Is the economic justification of the project sufficient to warrant construction from normal revenues and/or credit, taking into consideration such factors as bonding capacity and general financial ability of the governmental unit? (b) Will the project add an appreciable burden in the form of maintenance charges, or will revenues be adequate to carry operating costs including possible additional outlay?

Employment Potentialities: (a) What is the percentage of labor cost to total cost of the project? (b) What is the man-year cost? (c) What are the requirements of skilled and common labor? (d) Is the class of labor required by the project available in the community in which it is to be constructed?

BUDGETING

Budgeting is the process of allocating financial resources for carrying out the program. Budgeting does more than assemble inventory data through schedules setting forth capital needs over a period of years: It tentatively apportions outlay for the desired program in terms of anticipated revenues and long-range fiscal procedures. Needless to say, this last step is the most difficult to attain because it has the appearance, to the elected legislator, of committing public funds beyond his own term of office, which may mean failure to be re-elected. It is therefore highly desirable that the initiative should come from some permanent non-political agency which enjoys public confidence.

The first step in the budgeting procedure is to forecast for the period agreed upon the probable revenue which will be realized from available sources and to determine the proportion of this revenue which may be used for capital expenditures. As much of the public works program as can be financed may then be specifically provided for by earmarking the revenues for that purpose. This is over-simplification, of course, and takes no account of the many intermediate steps in the process, or of the negotiations, the compromises, the outside pressures, and the probable political bargaining which go into the crucible from which the long-range capital budget will ultimately be poured. The long-term program of public works is the physical plan expressed in terms of time and money and the long-range capital budget is the financial plan by which the physical plan may be carried out.

FEDERAL EXPERIENCE IN PROGRAMMING

In the Federal Government, Congressional appropriations determine the extent of the work to be undertaken in any fiscal year, and the existence of an approved six-year program will facilitate the expansion or contraction of expenditure as Congress may authorize.

The experience with river, harbor and flood control work, public buildings and public roads is significant. Lump-sum appropriations for application to a list of approved projects or for expenditure in conformity with closely defined regulations have permitted much more efficient use of available funds than fixed amounts for individual projects.

The experience of the corps of engineers with river and harbor work is perhaps the best example and a detailed description of this procedure, as outlined in the December, 1936, National Resources Committee report on Public Works Planning, seems pertinent here.

"The first step in a river or harbor improvement is authorization by Congress for a preliminary examination and survey," says the report. "In effect, this authorizes the chief of engineers to direct the district engineer in whose district the proposed improvement lies to make a preliminary examination and report to him whether there appears to be sufficient merit in the proposal to justify a thorough examination.

"The district engineer's report passes via the division engineer to the Board of Engineers for Rivers and Harbors (of seven engineer officers) which reviews all river and harbor improvements from an engineering viewpoint. The board report, with those of the district and divisional engineers, is passed on to the chief of engineers who directs a survey if found justified. If a survey is not found justified, the case is closed by the submission to Congress of the report on the preliminary examination.

"The report on a survey so authorized presents a definite plan of improvement, estimates of costs and of benefits, and a favorable or adverse recommendation. The report is reviewed by the division engineer, the Board of Engineers for Rivers and Harbors, and the Chief of Engineers. It is transmitted by the Secretary of War to Congress and referred by the Speaker to the proper committee of Congress—the Committee on Rivers and Harbors in the House and the Committee on Commerce in the Senate. Upon passage of an 'authorization to improve' bill through both houses of Congress and signature by the President, the proposed improvement becomes an adopted project. The actual construction work begins on it when Congress provides the necessary funds.

"Since 1914 it has been the custom to make appropriations in lump sums each year for rivers and harbors improvements which have been authorized by Congress, and the allotments from this lump-sum appropriation to the separate projects are made by the Secretary of War, upon the recommendation of the Chief of Engineers of the army. If there are any projects in the pending authorization bill upon which work should not be carried on, the President or the Secretary of War is still in a position to order that no allotments shall be made for these projects.

"A somewhat similar situation exists in the field of public buildings where the Secretary of the Treasury and the Postmaster General are authorized by the Public Buildings Act of 1926 to report annually to Congress as to needed public buildings. They are responsible for the preparation of a 'Program' and money is appropriated largely on the basis of the estimates submitted by the Office of the Supervising Architect.

"The Bureau of Public Roads in its work on the Federal-aid highway system has similarly developed procedures for selection of desirable road projects so as to secure conformity of individual units of construction with the ultimate national highway system. Through the authority granted to the Bureau for negotiation and agreement with States, projects can be developed and selected a year or more in advance of proposed construction.

"In the days before the budget, Congress did all the selection of public work projects, acting under pressure from the various bureaus and departments most concerned. The activities of the bureaus have now been funneled through the budget but Congress naturally retains the basic control of the finances of the government."

In the same report, the procedure by which the Public Works Administration operates has been summarized as follows:

"All projects requested by Federal agencies pass through the projects division in the Public Works Administration, with the exception of those involving construction of Federal buildings, such as post offices and similar structures. The projects division examines all projects from the standpoint of engineering, finance, and economics. In some types of work, notably river and harbor improvements, such examinations and studies have previously been made by the corps of engineers. In these cases, when the project has been recommended by the corps of engineers, no further examination along these lines is deemed necessary.

"Non-federal projects, with the exception of transportation and housing loans, begin in the office of the state engineers (P. W. A.) and pass with its recommendations to the projects division at P. W. A. headquarters in Washington. They are then examined from financial, engineering, and legal points of view in the divisions bearing those titles. Transportation projects do not go through the state offices, but begin at once in Washington where they are examined separately in special divisions devoted to those subjects."

FEDERAL SIX-YEAR PROGRAMS

For many years public works have been advocated as an important factor in controlling employment and in influencing the flow of capital, and it has been argued that planned and directed public works might be used for purposes of economic stabilization. A bill to create an emergency public works board was introduced in 1919 by Senator Kenyon, but was dropped after unfavorable reports.

During the next ten years, however, various proposals for long-range planning of public construction were made in the state legislatures and in Congress, culminating in the passage of the Employment Stabilization Act of 1931. The Federal Employment Stabilization Board created by this act was directed to watch the movement of business activity, and to report to the President whenever a state of depression existed or was anticipated in the next six months. The President is authorized to transmit the report to Congress, with an estimate of the appropriation needed for public construction to improve conditions in the affected area. For these purposes the law provides for the programming of Federal construction on a six-year basis, and specifically declares it to be "the policy of Congress to arrange the construction of public works so far as may be practicable in such manner as will assist in the stabilization of industry and employment through the proper timing of such construction, and that to further this object there shall be advance planning including preparation of detailed construction plans, of public works by the construction agencies and the board." The law also definitely provides for annual revision of the program and extension by one year.

Unfortunately, the depression was well under way before the passage of the stabilization act of 1931, so that it was not possible to realize to the full extent the potentialities of the act for long-term programming of public works by Federal agencies before the launching of the $3,300,000,000 national recovery program in May, 1933. However, the six-year programs which had been submitted for two successive years by Federal agencies were very useful in the selection of Federal projects under the expanded recovery program, due largely to the data readily available and the experience gained in that short time through the board's established contacts and practical working relations with Federal construction agencies numbering more than 100. The Stabilization Board was abolished and its functions transferred by executive order to the Department of Commerce in March, 1934. On authority of the President, the projects division of the Public Works Administration acting for the National Resources Committee requested each Federal agency concerned with construction to revise its construction program in 1936, 1937 and the 1938 revision now under way, so that in effect this function of the stabilization act has been continued.

STATE EXPERIENCE IN PROGRAMMING

Long-term programming by the various construction agencies of the Federal Government has already made notable progress through the efforts of the Stabilization Board, the National Resources Committee and the Federal Emergency Administration of Public Works; but among state and local governments the practice, with a few notable exceptions, is of recent origin. To stimulate this work on the part of non-Federal agencies, the National Resources Board coöperated with the state planning boards and the Public Works Administration in conducting national inventory of works projects early in 1935. A second inventory was undertaken in July, 1936, with the responsibility for participating in it left solely to the individual state planning boards. Wholly aside from the uses made by Federal emergency construction agencies of the twenty billion dollar project-list compiled, the inventory served to emphasize the need for non-Federal long-term planning.

If we are to avoid waste and duplication and promote an orderly and unified development, there must be not only careful planning of public construction by each governmental unit, but also coördination of local programs with state and regional and national programs. In conducting the national public works inventories and programs referred to above, the state planning boards are in a strategic position to act as public works councils, stimulating interest in public works programming on the part of local governments, supplying advice and technical skill, and integrating from the larger point of view of the State as a whole, the various programs prepared by counties, townships and municipalities.

FUNCTION OF THE INVENTORY

The inventory of public works projects is not, of course, a long-range program, nor is it in any sense of the word a capital budget. It is, however, an initial step out of which both a program and a capital budget may evolve. It is a practical and useful means of introducing the programming idea to public officials and of providing a primary reservoir of projects which may be winnowed and refined by planners and construction experts until the elements of a program emerge from it. The inventory procedure in the public works programming process corresponds to the collection of facts in research: many facts will be discarded, but out of the whole body of data accumulated, those pertinent to solution of the particular problem will be drawn.

In general, the following steps are provided for: (1) Preliminary drafting of a long-term public works program by the appropriate planning agency based upon the comprehensive plan and submission to the governing body for use in preparing the official budget; (2) formal review and ratification of the program by the governing body for incorporation into the official budget; (3) adoption of a period of five or six years for which budget estimates are to be scheduled, subject to revision by a specific procedure in case of altered circumstances; (4) annual review, revision, and extension of the long-range program and of the budget; (5) authorization either of special tax levies or recurrent appropriations for the duration of the budget period to guarantee the availability of funds for the programmed capital outlays.

In the absence of legislation, much may still be done. The state planning boards can secure and keep up-to-date inventories of state and local projects; and with the basic planning data compiled or available, they can work these project inventories into preliminary programs. Even without any long-range budgeting provisions, construction departments can so program their work as to make the annual budget serve a broader purpose, if the professional planner can convince them of the wisdom of such a course. State, regional, county and city planning commissions can work with construction agencies toward the goal of long-term programming, and can coördinate construction programs.

Through their contacts with state and local governments and with county, municipal, and regional planning agencies on the one hand, and with Federal public construction agencies and the national planning agency on the other, the state planning boards will become an important factor in the efficient operation of the Federal system. The strength of democracy lies in its flexibility, in its receptiveness to experiment, and in its readiness to devise new techniques for coping with changing economic and social conditions. Coördinated planning through Federal, state, and local agencies is such a technique; and its success in the field of public works programming has elevated it from the realm of experiment to the category of a definitely workable procedure.

Planning Promotes Progress

E. D. RIVERS, Governor of the State of Georgia

FUNDAMENTALLY, there are two great schools of thought in this country: the progressive and the reactionary. The progressive person realizes that times and conditions change and that if the interest of the whole people is to be adequately served and the general welfare properly promoted, there must be changes in government, in society, and in economics to keep pace with the changing needs of human beings. For this reason, the progressives are usually in the present day referred to as humanitarians; that is, they put the welfare of human beings as a first objective of government and the first philosophy of life. The reactionary is one who believes in retaining the status quo at all hazards and letting current events and changes in conditions adjust themselves as best they can to the status quo, regardless of the effects generally upon the people. The progressive places humanity first, the reactionary places property first.

It is my conviction that this nation was intended from the beginning to be progressive, to put humanity first. Prior to the founding of this country most of the people who later settled it lived in England. England, in those days, was predominantly reactionary. Those who settled this country tired of this trespass on human rights. They left a land of reaction to found a land of progressivism. When they laid the mud-sills of government here, they took pains to write into the preamble of the Constitution and into every subsequent paragraph and amendment thereto the unmistakable purpose of promotion of human rights and progress. But in no single word, sentence or paragraph of the documents of government they drafted can we find any intimation that this should be a government devoted to having people get rich. I, therefore, feel justified in my conclusion that it was intended from the beginning that this government should be devoted to human rights and progress for their protection. I am a progressive.

George Washington was a great progressive, and, likewise, a great planner. To perfect the new nation required planned patience, wisdom, bravery, hardship and faith. Washington, as a surveyor, a planner, was our first good roads pioneer. Washington, as a planning educator, founded from his bounty what is now Washington and Lee University. Yet, for the pains of his planning, he incurred the enmity of the leading newspapers of his day, much disloyalty among his own cabinet members, and those of his own party. Like anyone who plans progress for human beings, he was misunderstood and therefore was maligned.

As with Washington, so later with Jefferson, Jackson, and countless others who led in a program of progressive planning for humanity, who brought into the world a new philosophy in advance of the thinking of the average men of so-called practical business affairs.

Almost a century has passed, yet we have survived our wars, our panics, the preposterous prosperity period of 1920, the greatest gambling event in the history of America—the exploitation of Florida, and the dire distress resulting from unemployment and from bank failures of 1932 and 1933. The United States is here today the richest and most powerful nation in the world, because we are a progressive nation with a leadership that constantly plans in advance for the general welfare of humanity.

If we are to continue to be a great nation and a prosperous people, we must profitably plan our progress for the future and with the change of time expand our methods of planning our progress. We must keep the faith, regardless of the slandering we receive and in the face of the direst predictions of calamity howlers.

There are many great needs for planning. The personnel of those who administer government should be planned through proper training and merit examinations. So few of our people, indeed such an infinitesimal per cent, can have the opportunity to administer government that consideration should be given first to the vast throng of our people who cannot hold public positions, rather than to salvaging spoils under political pressure for those few who do hold public position. Efficiency and economy in government, through a trained, patriotic and energetic personnel, need to be planned for the national, state and local governments. Only by planned personnel for government can extravagance, waste and corruption be eliminated. Planning a personnel for public positions that will cause families to be ambitious, to train for public service the ablest and finest of their household, is greatly needed in every phase of our government today. Following through the thought of planning personnel goes even further than simply governmental service. It involves planned education to implant character and to train for avocations and professions the youth of our land to the end that they will be suited to work in the various enterprises that will make for the development and conservation of our natural resources, our cultural and spiritual advancement.

Planning our finances to the end that government may economically invest public funds for the program of the whole people, with popular support, is mandatory. American democracy has brought to the world gifts past appraisal. But democracy is a process of education as well as a form of government. It confers great privileges upon the individual, but imposes the inevitable obligation as well. While the price we pay through taxation may at times seem burdensome, yet it is small indeed in comparison to the benefits and privileges which accrue from the civilization built here through planned democratic processes of government.

However, improper planning of our finances has caused through haphazardness and immediate necessities an opportunity for reactionaries to send out propaganda against taxation. It is high time that in

planning the finances of government, we accent in the public mind the blessings from taxation. Despite the abuses, iniquities and lack of uniformity in financing government, taxation is still one of the greatest single blessings of the masses of our people. Through the process of taxation, the government reaches down into the channels of business and trade and lifts billions of dollars up into the treasuries of government, then this money descends through various governmental services, to build highways, to educate boys and girls, to provide health and recreational facilities for the people, to give systematic security to the old, blind, unemployed, dependent and crippled children, to conserve, develop and distribute the benefits of our vast natural resources, to care for our sick, our insane, our other underprivileged, to protect society against criminals, to provide for the common defense of all our people, and otherwise to promote the general welfare. As this money descends in the form of these governmental services, it is again spent back into the channels of business and trade. Not a dollar of it is lost or destroyed. Every dollar the government takes up to the treasury from business and trade through taxation, descends again, through governmental services, back into the channels of business and trade. Yet, on the round the money makes, it performs a fine function of planned progress for human beings. If the money remained entirely in the channels of business and trade, government would perish and society become stagnant.

Without taxation, the average person could not educate his children, could not have a paved highway, and even the rich could not enjoy the blessings, protection and progress brought by taxation. Recently I had breakfast with Mr. Henry Ford at Ways, Georgia, where he is doing a wonderful job of planned programs himself. As I thought of the great wealth of Mr. Ford and the great blessings of taxation, I was impressed that with all of his wealth, Mr. Ford could not build the highways and bridges over which he travels in his trips around the country and finance the courts and the officials who protect him along the route, and support the many other public benefits he enjoys all by taxation, though he should exhaust his entire fortune in the endeavor.

Nevertheless, there is need for planned financing of government. There is need for uniform tax laws. The lack of uniformity of taxes in the several States and in local communities within the several States is most glaring. Obsolete and unjust tax laws on the part of a given State or its subdivisions causes maladjustment in industry. An industry which under uniform tax laws could most efficiently and economically operate in a certain State may be forced by unjust and disuniform tax laws to locate in a different State and incur in processing and distribution cost that he passes on to the consumer. In addition to the amount of direct tax paid, it is of ultimate great benefit to our people that our tax laws be made uniform and modern to meet changed conditions as well as adequate to support essential progressive governmental services.

One of the great coming conflicts in American history is going to be over the question of equalizing governmental services and governmental costs for those services between the relatively rich areas of the country and the relatively poor areas of the country, to the end that equal governmental services be rendered all our people, and equal costs of those services be borne uniformly whether in the rich urban centers or the remote rural areas. This calls for a planned national financing for an equalization fund to be distributed for state administration, especially for health, education, and highways.

As with personnel, so we might carry the picture of planned financing to include private enterprises. Industry should be located close to the source of raw materials with proper regard for reaching the centers of consumption through equitable rates for distribution. No commercial enterprise should be over- or under-capitalized. Adequate credit facilities and proper opportunity for expansion should be permitted. Private budgeting should be prepared and provided. Planned financing, both in private enterprise and in public services, is a prime need for our people and offers opportunity for the most enthusiastic planning.

Planning of our transportation and distribution system in this country is so imperative that the plight of our railroads serves as a glaring example of this need. There should be a planned coördination between air-, water-, railroad- and motor vehicle-transportation, as well as between public and private transportation. This one field justifies a great planning effort. Like taxation, rates of transportation should be uniform between States. At the present time, artificial tariff barriers have been erected between various States and various sections of the country in varying degree. While the Constitution prohibits the levying of a tariff between States, the differentials in transportation rates have in practice set up such tariffs. This has caused a maladjustment in industry, a higher cost of commodities to the consumer, neglect of great natural resources and the corresponding lessening of our national wealth, and sectional business bitterness that has retarded our progress. Whole industrial villages and cities have become deserted, millions of dollars of investments lost, and community culture and sentiments uprooted. No sound economy in this country can be had until there is a free flow of commerce between every State and region of the country, unhampered by artificial tariff barriers in the form of transportation rate differentials. Every State in this country has enough resources and natural advantages to develop uniformly an economy that will be sound and progressive.

We need a planned balancing of our populations between rural and urban divisions of our national life. No more people should live in our cities and towns and villages than are necessary to carry on the normal functioning of industry and commerce. To overcrowd these centers means relief rolls in times of depression and consequent increase in costs of taxation, as well as human suffering. Those not normally needed in

commerce and industry should be induced to live in the rural areas where they can have their own little house, gardens, chickens and eggs, butter and milk, fruits and vegetables—the back log of a living, regardless of periods of prosperity, recession or depression. The only way to induce our young people voluntarily to adjust the population between rural and urban life is to plan a more attractive rural life for them to the end that they will want to live in the country as much as they want now to live in the towns and cities. This can only be accomplished by equality in education and health, adequate all-weather highway facilities, the benefits of electricity and the modern conveniences attendant thereon, and tax burdens equalized between heavily tax-valued communities and low tax-valued communities. In my opinion, North Carolina has planned the best balance of population between its rural and urban life. No city in North Carolina has more than 100,000 people. The balancing of its population has likewise been accompanied by a balancing, to a great extent, of agriculture and industry.

We in Georgia emerged into the governmental planning field on July 1, 1937, less than a year ago. We created a planning commission composed of four citizens appointed by the governor and the respective heads of our departments of highways, public health, natural resources, and public education. At the head of this planning board, I named Henry T. McIntosh, long a volunteer planning enthusiast, editor of the Albany, Georgia, *Herald*, one of our best smaller daily newspapers, and with him such outstanding people as our great chemist, Dr. Charles H. Herty (noted particularly for his recent discovery of a process to make paper out of our pine gum, cottonwood and other southern timber) and Mrs. Martha Berry, nationally known for her original and unique educational institution for the underprivileged known as the Berry Schools.

We went aggressively into the planning of both human and natural resources. At that time, counting the District of Columbia, Georgia stood 49th in education; we have since lengthened our term of schools, raised and promptly paid our teachers, installed a system of free textbooks from the first grade through the high school, included vocational subjects, installed school libraries, instituted classes to reduce our percentage of illiteracy, started an audio-visual educational program, added 115 additional vocational agricultural teachers, added more than 200 home economics teachers, and doubled our high-school enrollment in vocational subjects, so that now Georgia ranks well up among her sister States in equal educational opportunities for our children. At the time our planning commission was established, Georgia was spending only three cents per capita on public health; now we are spending ten times that amount, and whereas then every form of disease was on the increase, now every form of disease is on the decrease. Then we had no program of soil-erosion prevention, rural electrification, rural route highways; now in this short time we have covered more than two-thirds of our State with

conservation work; we are spending $3,000,000 of state and federal funds on rural post roads and have already built hundreds of miles of rural electric lines. Then, our primary highway system was being built under the political spoils system; now we have in progress a highway planning survey based upon through and local traffic conditions, scenic, historic and recreational spots, possibility of future developments, and other factors. Then we had no natural resources department; now we have a model for the entire country with divisions of forestry, mining and geology, wild life and parks, and historical sites and monuments. Whatever we may think of it, with our increasing population, and our increasing machinery, the trend in the nation is toward shorter hours of work. We are planning for our people to spend leisure time outdoors or in recreational centers rather than increasing traffic hazards on the highways or in beer joints and other questionable places. To this end we have in the last twelve months established sixteen state parks and are in process of establishing thousand-acre park tracts in each county that does not have a state or national park. When our planning commission was created, we had no form of social security. Now we have the full field offered by any other State, including unemployment compensation, re-employment service, old-age insurance, old-age pensions, aid for the blind, and for dependent crippled children. We have constructed a modern prison at a cost of one and a half million dollars. It is the most expensive public building in our State. It cost much more than our state capitol did. We have installed industries, both to make the penal system self-sustaining, and to teach the prisoners trades and occupations for their rehabilitation when they are released. We send the commodities we produce only to agencies, departments, institutions, and subdivisions of the state government.

When our planning commission was created, we had no department of safety or state police patrol. We now have one of the best in the country and have reduced our accident and death rate on the highways tremendously, as well as our premiums on burglary insurance. These are among many things we have accomplished for Georgia by planning.

We should have national, regional, state and community planning. Our planning act authorizes and requires this coördination. We are carrying forward in the whole program. I am not an authority on planning, and came here not to give you expert planning advice. I am an enthusiast for planning, because it is essential to progress, and I came here to give to this conference such help as the presence on your program of a governor from one of the forty-eight States can give.

I feel complimented that you invited me and trust that my contribution may have reciprocated the invitation in value. I hope to have the pleasure of welcoming the National Conference on Planning to Georgia one of these days. You could not meet in a State that is more in step with your efforts.

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